

Appendix B

Agency Consultation

- Appendix B1. MNR and MTCS
Confirmation Letters
- Appendix B2. Additional Agency
Comments

**Appendix B1. MNR and MTCS
Confirmation Letters**

January 15, 2013

NextEra Energy Canada
5500 Service Road, Suite 205
Burlington, ON L7L 6W6

RE: NHA Confirmation for Goshen Wind Energy Centre

Dear Tom Bird:

In accordance with the Ministry of the Environment's (MOE's) Renewable Energy Approvals (REA) Regulation (O.Reg.359/09), the Ministry of Natural Resources (MNR) has reviewed the *Natural Heritage Assessment Report – Goshen Wind Energy Centre* for the Goshen Wind Energy Centre project located in the Municipalities of Blue Water and South Huron, and submitted by Nextera Energy Canada, ULC on January 15, 2013.

In accordance with Section 28(2) and 38(2)(b) of the REA regulation, MNR provides the following confirmations following review of the natural heritage assessment:

1. The MNR confirms that the determination of the existence of natural features and the boundaries of natural features was made using applicable evaluation criteria or procedures established or accepted by MNR.
2. The MNR confirms that the site investigation and records review were conducted using applicable evaluation criteria or procedures established or accepted by MNR, if no natural features were identified.
3. The MNR confirms that the evaluation of the significance or provincial significance of the natural features was conducted using applicable evaluation criteria or procedures established or accepted by MNR.
4. The MNR confirms that the project location is not in a provincial park or conservation reserve.
5. The MNR confirms that the environmental impact study report has been prepared in accordance with procedures established by the MNR.

In accordance with Section 28(3)(c) and 38(2)(c), MNR also offers the following comments in respect of the project.

Turbines 9, 46, 47 and 82

At this time, information available in the Natural Heritage Assessment and Environmental Impact Study is insufficient to support development of turbines 9, 46, 47 and 82. Candidate significant waterfowl stopover and staging habitats WSST-15 (near turbine 9) and WSST-36 (near turbines 46, 47 and 82) require additional wildlife surveys and information about potential negative environmental effects. As a result, this letter does not confirm the following section of the Environmental Impact Study:

- Table 5.6 as it relates to Waterfowl Stopover and Staging Areas

The alternative infrastructure layout proposed in a memo submitted January 14, 2013 has been accepted and supersedes information provided in the Natural Heritage Assessment and Environmental Impact Study.

Preconstruction Monitoring

In accordance with Appendix D of MNR's NHA Guide, a commitment has been made to complete pre-construction assessment(s) of habitat use for the following candidate significant wildlife habitats:

- Bat Maternity Colonies (features BMC-235, BMC-242, BMC-249, BMC-267, BMC-282, BMC-285, BMC-352, BMC-358, BMC-372, BMC-648, BMC-720)
- Turtle Wintering Ares (features TOW-01, TOW-03)
- Reptile Hibernacula (features RH-01, RH-02, RH-03, RH-04, RH-05, RH-06, RH-07, RH-08)
- Amphibian Woodland Breeding Habitat (features AWO-02, AWO-33, AWO-34, AWO-35)
- Colonial Nesting Bird Breeding Habitat (feature CNB-01; Note: this habitat was deemed significant but requires supplemental data collection)

MNR has reviewed and confirmed the assessment methods and the range of mitigation options. Pending completion of the assessments and determination of significance, the appropriate mitigation is expected to be implemented, as committed to in the environmental impact study.

Post-Construction Monitoring

A commitment has been made in the Environmental Impact Study to conduct post-construction monitoring and if determined necessary, implement mitigation measures. For the Goshen Wind Energy Centre this includes the following significant natural features:

- Bat Maternity Colonies (features BMC-189, BMC-229, BMC-326, BMC-342, BMC-757)
- Amphibian Woodland Breeding Habitat (features AWO-14, AWO-25, AWO-27, AWO-30)
- Colonial Nesting Bird Breeding Habitat (feature CNB-01)
- Habitat for Plant Species of Conservation Concern – multiple species (features SCP-12, SCP-13, SCP-14, SCP-15, SCP-16, SCP-17)
- Habitat for Bird Species of Conservation Concern – Red-headed Woodpecker (feature SCB-03)

The following candidate significant natural features will also be monitored post-construction if they are deemed significant during pre-construction surveys:

- Bat Maternity Colonies (features BMC-235, BMC-242, BMC-249, BMC-267, BMC-282, BMC-285, BMC-352, BMC-358, BMC-372, BMC-648, BMC-720)
- Turtle Wintering Ares (features TOW-01, TOW-03)
- Reptile Hibernacula (features RH-01, RH-02, RH-03, RH-04, RH-05, RH-06, RH-07, RH-08)
- Amphibian Woodland Breeding Habitat (features AWO-02, AWO-33, AWO-34, AWO-35)

In addition to the NHA and EIS, an Environmental Effects Monitoring Plan (EEMP) that address post-construction mortality monitoring and mitigation for birds and bats must be prepared and implemented. Environmental Effects Monitoring Plans for birds and bats must be prepared in accordance with MNR Guidelines and should be reviewed by MNR in advance of submitting a REA application to MOE in order to minimize potential delays in determining if the application is complete. Comments provided by the MNR with respect to the EEMP must be submitted as part of the application for a REA.

This confirmation letter is valid for the project as proposed in the natural heritage assessment and environmental impact study, including those sections describing the Environmental Effects Monitoring Plan and Construction Plan Report. Should any changes be made to the proposed project that would alter the NHA, MNR may need to undertake additional review of the NHA.

Where specific commitments have been made by the applicant in the NHA/EIS with respect to project design, construction, rehabilitation, operation, mitigation, or monitoring, MNR expects that these commitments will be considered in MOE's Renewable Energy Approval decision and, if approved, be implemented by the applicant.

In accordance with S.12 (1) of the Renewable Energy Approvals Regulation, this letter must be included as part of your application submitted to the MOE for a Renewable Energy Approval.

Please be aware that your project may be subject to additional legislative approvals as outlined in the Ministry of Natural Resources' *Approvals and Permitting Requirements Document*. These approvals are required prior to the construction of your renewable energy facility.

If you wish to discuss any part of this confirmation or additional comments provided, please contact Jim Beal at Jim.Beal@ontario.ca or 705-755-3203.

Sincerely,



Kazia Milian
Regional Planning Supervisor
Southern Region MNR

cc Jim Beal, Southern Region Renewable Energy Coordinator, MNR
Amy Cameron, Renewable Energy Planning Ecologist, MNR
Ian Hagman, Guelph District Manager, MNR
Narren Santos, Environmental Approvals Access & Service Integration Branch, MOE
Zeljko Romic, Environmental Approvals Access & Service Integration Branch, MOE

Ministry of
Natural Resources
Renewable Energy Operations Team
300 Water Street
4th Floor, South Tower
Peterborough, Ontario K9J 8M5

Ministère des
Richesses naturelles



January 16, 2013

NextEra Energy Canada
5500 Service Road, Suite 205
Burlington, ON L7L 6W6

RE: Modifications to Goshen Wind Energy Centre Project Location

Dear Tom Bird:

The Ministry of Natural Resource (MNR) has received the document dated January 15, 2013, which describes modifications to the Goshen Wind Energy Centre project location made subsequent to MNR's letter confirming the Natural Heritage Assessment in respect of the project.

Upon review of the modifications, MNR is satisfied that the Natural Heritage Assessment requirements of Ontario Regulation 359/09 have been met. Please add this letter as an addendum to the confirmation letter issued January 15, 2013 for the Goshen Wind Energy Centre project.

If you wish to discuss, please contact Jim Beal at Jim.Beal@Ontario.ca or 705-755-3203.

Sincerely,

A handwritten signature in blue ink that reads "K Milian".

Kazia Milian
Regional Planning Supervisor
Southern Region MNR

cc Jim Beal, Southern Region Renewable Energy Coordinator, MNR
Amy Cameron, Renewable Energy Planning Ecologist, MNR
Ian Hagman, Guelph District Manager, MNR
Narren Santos, Environmental Approvals Access & Service Integration Branch, MOE
Zeljko Romic, Environmental Approvals Access & Service Integration Branch, MOE

Ministry of Tourism and Culture

Culture Programs Unit
Programs and Services Branch
Culture Division
401 Bay Street, Suite 1700
Toronto, ON, M7A 0A7
Telephone: 416-314-7152
Facsimile: 416-314-7175
Email: Kathryn.Bryant@ontario.ca

Ministère du Tourisme et de la Culture

Unité des programmes culturels
Direction des programmes et des services
Division de culture
401, rue Bay, Bureau 1700
Toronto, ON, M7A 0A7
Téléphone: 416-314-7152
Télécopieur: 416-314-7175
Email: Kathryn.Bryant@ontario.ca



July 16, 2012

Jim Wilson
Golder Associates Ltd.
309 Exeter Road, Unit #1
London, ON N6L 1C1
and
Scott Martin
Golder Associates Ltd.
110 Hannover Drive, Building A, Suite 203
St. Catharines, Ontario L2W 1A4

RE: Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, “Stage 1 Archaeological Assessment, NextEra Energy Canada, ULC Goshen Wind Energy Centre, Various Lots and Concessions, Geographic Townships of Hay, Stephen and Osborne, now Municipalities of Bluewater and South Huron, Huron County Ontario” Dated June 26, 2012, Received by MTCS Toronto Office on June 26, 2012, MTCS Project Information Form Numbers P001-608-2010 and P218-278-2011, FIT Number FIT-FETX82X, MTCS RIMS Number HD00762

Dear Mr. Wilson and Dr. Martin,

This office has reviewed the above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, R.S.O. 1990, c 0.18. This review has been carried out in order to determine whether the licensed professional consultant archaeologist has met the terms and conditions of their licence, that the licensee assessed the property and documented archaeological resources using a process that accords with the 1993 *Archaeological Assessment Technical Guidelines* set by the Ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of the cultural heritage of Ontario.

The report indicates that the subject property (*or portions thereof*) has archaeological potential and, consequently, recommends that it should be subject to a Stage 2 archaeological assessment.

Based on the information contained in the report, the Ministry is satisfied that the fieldwork and reporting for the archaeological assessment is consistent with the Ministry's 1993 *Archaeological Assessment Technical Guidelines* and the terms and conditions for archaeological licences. This report will be entered into the Ontario Public Register of Archaeological Reports. Please note that the Ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require any further information regarding this matter, please feel free to contact me.

This letter does not constitute the Ministry's written comments for the purposes of O. Reg 359/09.

Sincerely,

Kathryn Bryant
Archaeology Review Officer

cc. Archaeology Licensing Officer
Marc Rose, AECOM Canada Ltd.

**In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.*

Ministry of Tourism, Culture and Sport

Culture Programs Unit
Programs and Services Branch
Culture Division
401 Bay Street, Suite 1700
Toronto ON M7A 0A7
Tel.: (416)-314-7691
Email: Ian.Hember@ontario.ca

Ministère du Tourisme, de la Culture et du Sport

Unité des programmes culturels
Direction des programmes et des services
Division de culture
401, rue Bay, bureau 1700
Toronto ON M7A 0A7
Tél. : (416)-314-7691
Email: Ian.Hember@ontario.ca



January 18, 2013

Erin Wilson
Golder Associates Ltd.
32 Steacie Drive
Kanata, ON
K2K 2A9

RE: Review and Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, “Additional Stage 2 Archaeological Assessment, NextEra Energy Canada, ULC Goshen Wind Energy Centre, Huron County, Ontario,” Dated 18 December 2012, Filed by MTCS Toronto Office on 31 December 2012, MTCS Project Information Form Number P366-017-2012, MTCS File Number HD00762

Dear Erin:

This office has reviewed the above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18.¹ This review has been carried out in order to determine whether the licensed professional consultant archaeologist has met the terms and conditions of their licence, that the licensee assessed the property and documented archaeological resources using a process that accords with the 2011 *Standards and Guidelines for Consultant Archaeologists* set by the ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of the cultural heritage of Ontario.²

¹ This letter constitutes the Ministry of Tourism, Culture and Sport's written comments where required pursuant to section 22 of O. Reg. 359/09, as amended (Renewable Energy Approvals under the Environmental Protection Act), regarding the archaeological assessment undertaken for the above-captioned project. Depending on the study area and scope of work of the archaeological assessment as detailed in the report, further archaeological assessment reports may be required to complete the archaeological assessment for the project under O. Reg. 359/09. In that event Ministry comments pursuant to section 22 of O. Reg. 359/09 will be required for any such additional reports.

² In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional

The report documents the assessment of the study area as depicted in Figures 6-01 through 6-05 of the above titled report and recommends the following:

The Stage 2 assessment of Location 63 resulted in the recovery of one pre-contact Aboriginal biface. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 63.

Based on the information contained in the report, the ministry is satisfied that the fieldwork and reporting for the archaeological assessment are consistent with the ministry's 2011 Standards and Guidelines for Consultant Archaeologists and the terms and conditions for archaeological licences. This report has been entered into the Ontario Public Register of Archaeological Reports. Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require any further information regarding this matter, please feel free to contact me.

Sincerely,

Ian Hember
Archaeology Review Officer

- c. Marc Rose, AECOM Canada Ltd.
Mansoor Mahmood, Environmental Approvals Branch, Ministry of the Environment

artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.

**Ministry of Tourism,
Culture and Sport**

Culture Programs Unit
Programs and Services Branch
401 Bay Street, Suite 1700
Toronto, ON M7A 0A7
Telephone: (416)-314-7691
Email : lan.Hember@ontario.ca

**Ministère du Tourisme,
de la Culture et du Sport**

Unité des programmes culturels
Direction des programmes et des services
401 Rue Bay, Bureau 1700
Toronto, ON M7A 0A7
Téléphone: (416)-314-7691
Email: lan.Hember@ontario.ca



February 1, 2013

Marc Rose,
AECOM Canada Ltd.
300 Town Centre Boulevard, Suite 300
Markham, ON
L3R 5Z6

**RE: Goshen Wind Energy Centre
Various Lots and Concessions, Geographic townships of Hay, Stephen and
Usborne, now Municipalities of Bluewater and South Huron, Huron County,
Ontario
FIT Number FIT-FETX82X
DPR HD00762
PIF P218-038-2011**

Dear Proponent:

This letter constitutes the Ministry of Tourism and Culture's written comments as required by s. 22(3)(a) of O. Reg. 359/09 under the *Environmental Protection Act* regarding archaeological assessments undertaken for the above project.

Based on the information contained in the report(s) you have submitted for this project, the Ministry believes the archaeological assessment complies with the *Ontario Heritage Act's* licensing requirements, including the licence terms and conditions and the Ministry's 1993 Archaeological Assessment Technical Guidelines or the 2011 Standards and Guidelines for Consultant Archaeologists (whichever apply). Please note that the Ministry makes no representation or warranty as to the completeness, accuracy or quality of the report(s).*

The report recommends the following:

Stage 2 Archaeological Assessment: NextEra Energy Canada, ULC Goshen Wind Energy Centre Huron County, Ontario, Revised Report Dated 29 January 2013, Received by MTC Toronto Office on 30 January 2013, MTC Project Information Form Number P218-038-2011:

The Stage 2 archaeological assessment of the NEEC Goshen Wind Energy Centre resulted in the identification of 62 archaeological sites, including 37 pre-contact Aboriginal, 20 historic Euro-Canadian and five multicomponent.

Recommendations for each location are found below.

5.1 Location 1

The Stage 2 assessment of Location 1 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 1.

5.2 Location 2

The Stage 2 assessment of Location 2 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 2.

5.3 Location 3

The Stage 2 assessment of Location 3 resulted in the recovery of five pre-contact Aboriginal artifacts consisting of three pieces of chipping detritus and two utilized flakes. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 3.

5.4 Location 4

The Stage 2 assessment of Location 4 resulted in the recovery of pre-contact Aboriginal end scraper. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 4.

5.5 Location 5 (AhHk-139)

The Stage 2 assessment of Location 5 (AhHk-139) revealed a spatially discrete cluster of pre-contact Aboriginal artifacts, 32 of which were collected for further analysis, including 22 fragments of chipping detritus, five bifaces, two scraper, two utilized flakes and one Paleo-Indian projectile point. Given the presence of over 10 pre-contact

Aboriginal artifacts, including a Paleo-Indian projectile point, it is recommended that Location 7 be subject to a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as

well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. A sample of units will be screen through three millimetre mesh. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.

5.6 Location 6

The Stage 2 assessment of Location 2 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 6.

5.7 Location 7 (AhHk-140)

The Stage 2 assessment of Location 7 (AhHk-140) revealed a spatially discrete cluster of mid-to-late-19th century historic Euro-Canadian artifacts, 16 of which were collected for further analysis. This assemblage includes mid-to-late 19th century ironstone and three diagnostic bottle glass finishes that date to post-1850. As well, a single fragment of horse tack (a double throat sleigh bell dated to post-1880) was also collected. Given the presence of late-19th century material and the presence of a house indicated on the historic mapping, it is recommended that Location 7 (AhHk-140) be subject to a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 7 (AhHk-140) should also be conducted as part of the Stage 3 assessment.

5.8 Location 8

The Stage 2 assessment of Location 2 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 8.

5.9 Location 9

The Stage 2 assessment of Location 2 resulted in the recovery of one pre-contact Aboriginal bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 9.

5.10 Location 10

The Stage 2 assessment of Location 2 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 10.

5.11 Location 11 (AhHj-4)

The Stage 2 assessment of Location 11 (AhHj-4) revealed a spatially discrete cluster of mid-to-late-19th century historic Euro-Canadian artifacts, seven of which were collected for further analysis. This assemblage includes a variety of whiteware ceramic decorative types. Given the presence of mid-19th century material and the presence of a house indicated on the historic mapping, it is recommended that Location 11 (AhHj-4) be subject to a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 11 (AhHj-4) should also be conducted as part of the Stage 3 assessment.

5.12 Location 12

The Stage 2 assessment of Location 2 resulted in the recovery of two pieces of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 12.

5.13 Location 13 (AiHj-10)

The Stage 2 assessment of Location 13 (AiHj-10) identified a small scatter of pre-contact Aboriginal chipping detritus and fire-cracked rock. The survey resulted in the recovery of six pieces of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given the presence of fire-cracked rock in addition to a lithics scatter, it is recommended that Location 13 (AiHj-10) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.

5.14 Location 14

The Stage 2 assessment of Location 14 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus and one bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 14.

5.15 Location 15 (AiHj-17)

The Stage 2 assessment of Location 15 (AiHj-17) resulted in the recovery of an isolated pre-contact Aboriginal Early Archaic Nettling/Kirk corner-notched projectile point. Given the presence of this isolated Early Archaic projectile point, it is recommended that Location 15 (AiHj-17) be subject to a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as

well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. A sample of units will be screen through three millimetre mesh. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.

5.19 Location 19 (AiHj-12)

The Stage 2 assessment of Location 19 (AiHj-12) resulted in the recovery three pieces of pre-contact Aboriginal chipping detritus and a single projectile point. Despite the intensification of survey intervals no additional artifacts were recovered. Given the presence of a miniature projectile point and a small lithics scatter within a discrete area, it is recommended that Location 19 (AiHj-12) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.

5.20 Location 20 (AhHk-141)

The Stage 2 assessment of Location 20 (AhHk-141) resulted in the recovery of an isolated pre-contact Aboriginal Middle Archaic Brewerton corner-notched projectile point. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 20 (AhHk-141).

5.21 Location 21 (AhHk-142)

The Stage 2 assessment of Location 21 (AhHk-142) revealed a spatially discrete cluster of approximately 50 fragments of predominantly late-19th century historic Euro-Canadian artifacts, 16 of which were collected for further analysis. This assemblage includes 15 domestic artifacts and a single fragment of recent material.

Ceramics present in the domestic assemblage include ironstone and porcelain. There is also a fragment of marked ironstone dating from 1880 to 1904 and a fragmentary glass lightning stopper likely post-1880. Given the presence of late-19th century material and the historic association of the lot with the Canada Company, it is recommended that Location 21 (AhHk-142) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 21 (AhHk-142) should also be conducted as part of the Stage 3 assessment.

5.22 Location 22

The Stage 2 assessment of Location 22 resulted in the recovery of one pre-contact Aboriginal bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 22.

5.23 Location 23 (AiHj-13)

The Stage 2 assessment of Location 23 (AiHj-13) resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 23 (AiHj-13).

5.24 Location 24 (AhHj-7)

The Stage 2 assessment of Location 24 (AhHj-7) identified a small pre-contact Aboriginal lithics scatter, from which two bifaces and one projectile point were recovered. The survey resulted in the recovery of two pieces of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given the presence of a projectile point and two bifaces in a discrete area, it is recommended that Location 24 (AhHj-7) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.

5.25 Location 25

The Stage 2 assessment of Location 25 resulted in the recovery of one pre-contact Aboriginal bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 25.

5.26 Location 26 (AiHj-14)

The Stage 2 assessment of Location 26 (AiHj-14) identified a small pre-contact Aboriginal lithics scatter of nine artifacts, from which a retouched flake and a scraper were collected. The survey resulted in the recovery of two pieces of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 26 (AiHj-14).

5.27 Location 27 (AhHj-8)

The Stage 2 assessment of Location 27 (AhHj-8) resulted in the recovery of an isolated pre-contact Aboriginal Early Archaic Bifurcate Base projectile point. recovery of an isolated pre-contact Aboriginal Early Archaic Nettling/Kirk corner-notched projectile point. Given the presence of this isolated Early Archaic projectile point, it is recommended that Location 27 (AhHj-8) be subject to a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one

metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. A sample of units will be screen through three millimetre mesh. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.

5.28 Location 28 (AhHk-143)

The Stage 2 assessment of Location 28 (AhHk-143) revealed a spatially discrete cluster of approximately 60 fragments of predominantly mid-to-late 19th century historic Euro-Canadian artifacts, 10 of which were collected for further analysis. This assemblage includes nine fragments of ironstone and whiteware ceramic and a single fragment of bottle glass. Given the presence of mid-to-late 19th century material and the historic association of the lot with the Canada Company, it is recommended that Location 28 (AhHk-143) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 28 (AhHk-143) should also be conducted as part of the Stage 3 assessment.

5.29 Location 29

The Stage 2 assessment of Location 29 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus and one bifacially worked lithic tool [sic]. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 29.

5.30 Location 30

The Stage 2 assessment of Location 30 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus and one bifacially worked lithic tool [sic]. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 30.

5.31 Location 31 (AhHk-144)

The Stage 2 assessment of Location 31 (AhHk-144) resulted in the recovery of an isolated pre-contact Aboriginal Middle Archaic Brewerton side-notched projectile point. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 31 (AhHk- 144).

5.32 Location 32

The Stage 2 assessment of Location 32 resulted in the recovery of one pre-contact Aboriginal bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 32.

5.33 Location 33 (AhHk-145)

The Stage 2 assessment of Location 33 (AhHk-145) revealed a spatially discrete cluster of approximately 100 artifacts spanning the 19th century, 23 of which were collected for further analysis. This assemblage includes 21 domestic items, as well as one personal item and one fragment of recent material. Ceramics present in the domestic assemblage are ironstone, but there is a fragment of black glass in the assemblage that may indicate pre-1860 occupation of the site. Also collected was a percussion cap firearm mechanism with a manufacturing date range of 1838 to 1870. Given the presence of 19th century material and the historic association of the lot with the Canada Company, it is recommended that Location 33 (AhHk-145) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 33 (AhHk-145) should also be conducted as part of the Stage 3 assessment.

5.34 Location 34 (AhHj-10)

The Stage 2 assessment of Location 34 (AhHj-10) revealed a spatially discrete cluster of approximately 70 artifacts spanning the 19th century, 45 of which were collected for further analysis. This assemblage includes 38 domestic items, four personal items and three structural items. Ceramics present in the domestic assemblage include ironstone,

whiteware, yellowware, stoneware and utilitarian earthenware. The assemblage also includes a fragment of black bottle glass that may indicate pre-1860 occupation of the site. Given the presence of 19th century material as well as the presence of two homesteads within the vicinity on the historic mapping, it is recommended that Location 34 (AhHj-10) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 34 (AhHj-10) should also be conducted as part of the Stage 3 assessment.

5.35 Location 35 (AhHj-9)

The Stage 2 assessment of Location 35 (AhHj-9) resulted in the recovery of a single pre-contact Aboriginal Early Woodland Meadowood projectile point. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 35 (AhHj-9).

5.36 Location 36 (AhHk-147)

The Stage 2 assessment of Location 36 (AhHk-147) revealed a spatially discrete cluster of approximately 200+ artifacts spanning the 19th century, 56 of which were collected for further analysis. This assemblage includes 50 domestic items, one structural item and one organic item. Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, utilitarian earthenware, Rockinghamware, semi-porcelain and creamware. The assemblage also includes two fragments of black bottle glass that may indicate pre-1860 occupation of the site.

In addition, the assemblage includes one fragment of creamware, which also could indicate early 19th century occupation. Given the presence of 19th century material and the historic association of the lot with the Canada Company, it is recommended that Location 36 (AhHk-147) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as

well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 36 (AhHk-147) should also be conducted as part of the Stage 3 assessment.

5.37 Location 37 (AhHj-11)

The Stage 2 assessment of Location 37 (AhHj-11) revealed a spatially discrete cluster of approximately 300+ artifacts spanning the 19th century, 66 of which were collected for further analysis. This assemblage includes 53 domestic items, six structural items, four personal items and one recent item. Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, utilitarian earthenware, semi-porcelain and porcelain. The assemblage also includes one fragment of black bottle glass that may indicate pre-1860 occupation of the site.

Given the presence of 19th century material as well as the presence of two homesteads and other infrastructure within the vicinity on the historic mapping, it is recommended that Location 37 (AhHj-11) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 37 (AhHj-11) should also be conducted as part of the Stage 3 assessment.

5.38 Location 38 (AhHk-148)

The Stage 2 assessment of Location 38 (AhHk-148) revealed a spatially discrete cluster of approximately 300+ artifacts spanning the 19th century and including a small scatter of pre-contact Aboriginal artifacts, 94 of which were collected for further analysis. This assemblage includes 93 Historic Euro-Canadian artifacts, including 86 domestic items, six structural items and one recent item. It also includes one pre-contact Aboriginal lithic item.

Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, utilitarian earthenware, porcelain and Rockinghamware. Given the presence of 19th century material and Aboriginal pre-contact material, along with the lot's historical associated with the Canada Company, it is recommended that Location 38 (AhHk-148) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. There should also be engagement with First Nations groups expressing interest in the archaeological resources of the area.

Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 38 (AhHk-148) should also be conducted as part of the Stage 3 assessment.

5.39 Location 39 (AhHj-12)

The Stage 2 assessment of Location 39 (AhHj-12) revealed a spatially discrete cluster of approximately 600+ artifacts spanning the 19th century and including a small scatter of pre-contact Aboriginal artifacts, 138 of which were collected for further analysis. This assemblage includes 132 Historic Euro-Canadian artifacts, including 95 domestic items, 16 structural items, 16 personal items and one faunal item. It also includes six pre-contact Aboriginal lithic items. Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, utilitarian earthenware, porcelain, semi-porcelain and creamware. The assemblage also includes one fragment black bottle glass that may indicate pre-1860 occupation of the site. In addition, the assemblage includes one fragment of creamware, which also could indicate early 19th century occupation. Given the presence of 19th century material and Aboriginal pre-contact material, as well as the presence of a homestead within the vicinity on the historic mapping, it is recommended that Location 39 (AhHj-12) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. There should also be engagement with First Nations groups expressing interest in the archaeological resources of the area.

Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 39 (AhHj-12) should also be conducted as part of the Stage 3 assessment.

5.40 Location 40

The Stage 2 assessment of Location 40 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus and one bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 40.

5.41 Location 41

The Stage 2 assessment of Location 41 resulted in the recovery of four pieces of pre-contact Aboriginal chipping detritus and one retouched flake. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 41.

5.42 Location 42

The Stage 2 assessment of Location 42 resulted in the recovery of an isolated pre-contact Aboriginal chipping celt. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 42.

5.43 Location 43 (AhHj-13)

The Stage 2 assessment of Location 43 (AhHj-13) revealed a spatially discrete cluster of approximately 500+ artifacts spanning the 19th century and including a small scatter of pre-contact Aboriginal artifacts, 25 of which were collected for further analysis. This assemblage includes 24 Historic Euro-Canadian artifacts, including 22 domestic items, one structural item and one recent item. It also includes one pre-contact Aboriginal groundstone item. Ceramics present in the domestic assemblage include ironstone, whiteware, utilitarian earthenware and semi-porcelain. Given the presence of 19th century material and Aboriginal pre-contact material, as well as the presence of a homestead within the vicinity on the historic mapping, it is recommended that Location

43 (AhHj-13) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. There should also be engagement with First Nations groups expressing interest in the archaeological resources of the area.

Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 43 (AhHj-13) should also be conducted as part of the Stage 3 assessment.

5.44 Location 44 (AhHj-14)

The Stage 2 assessment of Location 44 (AhHj-14) revealed a spatially discrete cluster of approximately 80 artifacts spanning the 19th century, 29 of which were collected for further analysis. This assemblage includes 27 domestic items and two personal items. Ceramics present in the domestic assemblage include ironstone, whiteware and stoneware. Given the presence of 19th century material as well as the presence of several homesteads and a mill within the vicinity on the historic mapping, it is recommended that Location 44 (AhHj-14) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 44 (AhHj-14) should also be conducted as part of the Stage 3 assessment.

5.45 Location 45 (AhHj-15)

The Stage 2 assessment of Location 45 (AhHj-15) revealed a spatially discrete cluster of approximately 80 artifacts spanning the 19th century, 38 of which were collected for

further analysis. This assemblage includes 36 domestic items, one structural item and one recent item. Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, semi-porcelain and porcelain. The assemblage also includes one fragment black bottle glass that may indicate pre-1860 occupation of the site. Given the presence of 19th century material and the lot's historic association with the Canada Company, it is recommended that Location 45 (AhHj-15) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 45 (AhHj-15) should also be conducted as part of the Stage 3 assessment.

5.46 Location 46 (AhHj-16)

The Stage 2 assessment of Location 46 (AhHj-16) revealed a spatially discrete cluster of approximately 80 artifacts spanning the 19th century, 29 of which were collected for further analysis. This assemblage includes 27 domestic items and two structural items. Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, utilitarian earthenware and semi-porcelain. Given the presence of 19th century material and the lot's historic association with the Canada Company, it is recommended that Location 46 (AhHj-16) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 46 (AhHj-16) should also be conducted as part of the Stage 3 assessment.

5.47 Location 47 (AhHj-17)

The Stage 2 assessment of Location 47 (AhHj-17) revealed a spatially discrete cluster of approximately 100+ artifacts spanning the 19th century, 49 of which were collected for further analysis. This assemblage includes 45 domestic items, two structural items and two recent items. Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, utilitarian earthenware, semi-porcelain and creamware. The presence of creamware in the assemblage may indicate an early-19th century occupation of the site. The assemblage also includes a colourless glass bottle base with an open pontil mark, which may suggest an occupation date prior to 1855. Given the presence of 19th century material, it is recommended that Location 47 (AhHj-17) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 47 (AhHj-17) should also be conducted as part of the Stage 3 assessment.

5.48 Location 48 (AhHj-18)

The Stage 2 assessment of Location 48 (AhHj-18) revealed a spatially discrete cluster of approximately 150+ artifacts spanning the 19th century and including a small scatter of pre-contact Aboriginal artifacts, 59 of which were collected for further analysis. This assemblage includes 58 Historic Euro-Canadian artifacts, including 51 domestic items, five structural items and one personal item. It also includes one pre-contact Aboriginal lithic item. Ceramics present in the domestic assemblage include ironstone, whiteware and utilitarian earthenware.

The assemblage also includes three fragments of black bottle glass that may indicate pre-1860 occupation of the site. Given the presence of 19th century material and Aboriginal pre-contact material, as well as the presence of a homestead within the vicinity on the historic mapping, it is recommended that Location 48 (AhHj-18) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as

well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. There should also be engagement with First Nations groups expressing interest in the archaeological resources of the area.

Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 48 (AhHj-18) should also be conducted as part of the Stage 3 assessment.

5.49 Location 49 (AhHj-19)

The Stage 2 assessment of Location 49 (AhHj-19) revealed a spatially discrete cluster of approximately 250 artifacts spanning the 19th century, 88 of which were collected for further analysis. This assemblage includes 79 domestic items, six structural items, two personal items and one faunal remain. Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, utilitarian earthenware, semi-porcelain, porcelain, redware and pearlware. The presence of pearlware in the assemblage may indicate an early-19th century occupation of the site. The assemblage also includes two fragments of black bottle glass that may indicate pre-1860 occupation of the site. Given the presence of 19th century material and the lot's historic

association with the Canada Company, it is recommended that Location 49 (AhHj-19) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 49 (AhHj-19) should also be conducted as part of the Stage 3 assessment.

5.50 Location 50 (AhHj-20)

The Stage 2 assessment of Location 50 (AhHj-20) revealed a spatially discrete cluster of approximately 225 artifacts spanning the 19th century, 115 of which were collected for

further analysis. This assemblage includes 103 domestic items, six personal items, five structural items and one recent item. Ceramics present in the domestic assemblage include ironstone, whiteware, utilitarian earthenware, yellowware, porcelain and Victorian majolica. Given the presence of 19th century material as well as this location's proximity to several homesteads as indicated on the historic mapping, it is recommended that Location 50 (AhHj-20) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 50 (AhHj-20) should also be conducted as part of the Stage 3 assessment.

5.51 Location 51 (AhHj-21)

The Stage 2 assessment of Location 51 (AhHj-21) identified a sparse pre-contact Aboriginal scatter, from which five pieces of chipping detritus, a retouched flake and one Middle Archaic Brewerton projectile point were recovered. Despite the intensification of survey intervals no additional artifacts were recovered. Given the presence of one diagnostic artifact with more than one non-diagnostic artifact, it is recommended that Location 51 (AhHj-21) be subject to a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil.

5.52 Location 52 (AhHj-22)

The Stage 2 assessment of Location 52 (AhHj-22) resulted in the recovery of two pieces of pre-contact Aboriginal chipping detritus and a single projectile point. Despite the intensification of survey intervals no additional artifacts were recovered. Due to the sparseness of the scatter, and given that the cultural heritage value or interest of the site

has been sufficiently documented, no further archaeological assessment is recommended for Location 52 (AhHj-22).

5.53 Location 53

The Stage 2 assessment of Location 53 resulted in the recovery of a single pre-contact Aboriginal lithic blank. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 53.

5.54 Location 54 (AhHj-23)

The Stage 2 assessment of Location 54 (AhHj-23) resulted in the recovery of a single pre-contact Aboriginal Early Archaic Nettling/Kirk corner-notched projectile point. Given the presence of this isolated Early Archaic projectile point, it is recommended that Location 54 (AhHj-23) be subject to a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. A sample of units will be screen through three millimetre mesh. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.

5.55 Location 55 (AiHj-18)

The Stage 2 assessment of Location 55 (AiHj-18) resulted in the recovery of a single pre-contact Aboriginal Late Archaic Innes projectile point. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 55 (AiHj-18).

5.56 Location 56 (AhHj-24)

The Stage 2 assessment of Location 56 (AhHj-24) revealed a spatially discrete cluster of approximately 150 artifacts spanning the 19th century, 105 of which were collected for further analysis. This assemblage includes 100 domestic items, four structural items and one organic item. Ceramics present in the domestic assemblage include whiteware, ironstone, utilitarian earthenware, porcelain, semi-porcelain and Rockinghamware.

Given the presence of 19th century material as well as this location's proximity to a homestead as indicated on the historic mapping, it is recommended that Location 56 (AhHj-24) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 56 (AhHj-24) should also be conducted as part of the Stage 3 assessment.

5.57 Location 57 (AhHj-25)

The Stage 2 assessment of Location 57 (AhHj-25) revealed a spatially discrete cluster of approximately 125 artifacts spanning the 19th century, 95 of which were collected for further analysis. This assemblage includes 87 domestic items, four structural items, two personal items, one equestrian item and one piece of faunal remains.

Ceramics present in the domestic assemblage include whiteware, ironstone, utilitarian earthenware, porcelain and yellowware. Given the presence of 19th century material as well as this location's proximity to several homesteads as indicated on the historic mapping, it is recommended that Location 57 (AhHj-25) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 57 (AhHj-25) should also be conducted as part of the Stage 3 assessment.

5.58 Location 58

The Stage 2 assessment of Location 58 resulted in the recovery a single piece of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 58.

5.59 Location 59

The Stage 2 assessment of Location 59 resulted in the recovery of 16 pieces of historic Euro-Canadian domestic debris. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 59.

5.60 Location 60 (AhHi-5)

The Stage 2 assessment of Location 60 (AhHi-5) revealed a spatially discrete cluster of over 100 artifacts spanning the 19th century, 103 of which were collected for further analysis. This assemblage includes 97 domestic items, three faunal remains, two personal items and one structural item. Ceramics present in the domestic assemblage include whiteware, ironstone, redware, stoneware and Rockinghamware. Given the presence of 19th century material and this location's proximity to a homestead as indicated on the historic mapping, it is recommended that Location 60 (AhHi-5) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 60 (AhHi-5) should also be conducted as part of the Stage 3 assessment.

5.61 Location 61 (AhHi-6)

The Stage 2 assessment of Location 61 (AhHi-6) revealed a spatially discrete cluster of over 100 artifacts spanning the 19th century, 108 of which were collected for further analysis from ten test pits and one test unit.

This assemblage includes 56 domestic items, 35 structural items, nine metal items, five faunal remains and three personal items. Ceramics present in the domestic assemblage

include whiteware, ironstone, semi-porcelain, redware and Rockinghamware. In addition, the assemblage includes an ironstone maker's mark that can be dated to circa 1883. Given the presence of 19th century material and this location's proximity to a homestead as indicated on the historic mapping, it is recommended that Location 61 (AhHi-6) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 61 (AhHi-6) should also be conducted as part of the Stage 3 assessment.

5.62 Location 62 (AhHi-7)

The Stage 2 assessment of Location 62 (AhHi-7) revealed a spatially discrete cluster of approximately 200 artifacts spanning the 19th century and including a small pre-contact Aboriginal component, 31 of which were collected for further analysis. This assemblage includes 31 Historic Euro-Canadian artifacts, including 29 domestic items and two personal items. It also includes one pre-contact Aboriginal scraper. Ceramics present in the domestic assemblage include ironstone, whiteware and semi-porcelain. The assemblage also includes two mid-to-late 19th century bottle finishes. Given the presence of 19th century material and Aboriginal pre-contact material, as well as the presence of a homestead within the vicinity on the historic mapping, it is recommended that Location 62 (AhHi-7) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. There should also be engagement with First Nations groups expressing interest in the archaeological resources of the area.

Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 62 (AhHi-7) should also be conducted as part of the Stage 3 assessment.

The Ministry is satisfied with these recommendations.

This letter does not waive any requirements which you may have under the Ontario Heritage Act. A separate letter addressing archaeological licensing obligations under the Act will be sent to the archaeologist who completed the assessment and will be copied to you.

This letter does not constitute approval of the renewable energy project. Approvals of the project may be required under other statutes and regulations. It is your responsibility to obtain any necessary approvals or licences.

Please feel free to contact me if you have questions or require additional information.

Sincerely,

Ian Hember
Archaeology Review Officer

c. Scott Martin, Golder Associates

**Ministry of Tourism,
Culture and Sport**

Culture Services Unit
Programs and Services Branch
Culture Division
401 Bay Street, Suite 1700
Toronto ON M7A 0A7
Tel.: 416 314-7145
Fax: 416 314-7175

**Ministère du Tourisme,
de la Culture et du Sport**

Unité des services culturels
Direction des programmes et des
services
Division de culture
401, rue Bay, bureau 1700
Toronto ON M7A 0A7
Tél. : 416 314-7145



November 23, 2012

Meaghan Rivard, Cultural Heritage Specialist
Golder Associates
309 Exeter Road, Unit #1
London, ON N6L 1C1

Project: Goshen Wind Energy Centre
OPA Reference Number: FIT-FETX82X
Report Title: Goshen Wind Energy Centre
Applicant: NextEra Energy Canada, ULC
Location: Municipalities of Bluewater and South Huron, Huron County
MTC File No.: 40EA044

Dear Meaghan Rivard:

This office has reviewed the above-mentioned report (the "Report"), which has been submitted to this ministry as required under O. Reg. 359/09, as amended (Renewable Energy Approvals under the *Environmental Protection Act*) (the "REA regulation"). This letter constitutes the Ministry of Tourism, Culture and Sport (the "Ministry") comments for the purposes of section 23(3)(a) of the REA regulation regarding the heritage assessment undertaken for the above project.

The Report recommends the following:

Cultural Heritage Landscape

The participating properties were all determined to represent vernacular cultural heritage landscapes that are characterized by a homogeneous land use pattern of pastures, agricultural fields, woodlots and associated farmsteads. This study determined that the evolved rural vernacular cultural landscape associated with the Project location had no cultural heritage value or interest according to O.Reg. 09/06.

Therefore, no mitigation of cultural heritage landscapes is recommended.

Built Heritage Resources

A total of 60 participating properties were identified as containing residential and/or agricultural structures over the age of 40 years. These properties contained a total of 98 potential built heritage resources; 55 residences and 43 barns. Of these potential resources, 71 (35 houses and 36 barns) were identified as having cultural heritage value or interest according to O.Reg. 09/06. This study determined that there are no direct or indirect impacts anticipated on any of the 71 heritage resources identified.

Therefore, no mitigation of built heritage resources is recommended.

Based on the information contained in the Report, the Ministry is satisfied that the heritage assessment process and reporting are consistent with the applicable heritage assessment requirements established in s. 23 of O. Reg. 359/09. Please note that the Ministry makes no representation or warranty as to the completeness, accuracy or quality of the heritage assessment report (please see Note 1).

This letter does not waive any requirements under the *Ontario Heritage Act*.

This letter does not constitute approval of the renewable energy project. Approvals or licences for the project may be required under other statutes and regulations. Please ensure that you obtain all required approvals and/or licences.

Please ensure that the proponent is aware that, if new information or substantive project changes arise after issuance of this letter, the applicant should discuss them with you to determine if any additional assessment or reporting is required. If additional reporting or revisions are required, they should be submitted to the Ministry for review. Upon completion of that review, the Ministry will determine if any revisions to the content of this letter are required.

Should you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Joseph Muller
Heritage Planner

cc. Mr. Marc Rose, AECOM Canada Ltd.

Doris Dumais, Director
Environmental Approvals Access & Service Integration Branch, Ministry of the Environment

Agatha Garcia-Wright, Director
Environmental Approvals Branch, Ministry of the Environment

Chris Schiller, Manager
Culture Services Unit, Ministry of Tourism, Culture and Sport

Note 1: In no way will the Ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional heritage resources are identified or the Report is otherwise found to be inaccurate, incomplete, misleading or fraudulent.

**Ministry of Tourism,
Culture and Sport**

Culture Services Unit
Programs and Services Branch
Culture Division
401 Bay Street, Suite 1700
Toronto ON M7A 0A7
Tel.: 416 314-7145
Fax: 416 314-7175

**Ministère du Tourisme,
de la Culture et du Sport**

Unité des services culturels
Direction des programmes et des
services
Division de culture
401, rue Bay, bureau 1700
Toronto ON M7A 0A7
Tél. : 416 314-7145



December 21, 2012

Meaghan Rivard, Cultural Heritage Specialist
Golder Associates
309 Exeter Road, Unit #1
London, ON N6L 1C1

Project:	Goshen Wind Energy Centre
OPA Reference Number:	FIT-FETX82X
Report Title:	Appendix A - Built Heritage Inventory Addendum
Applicant:	NextEra Energy Canada, ULC
Location:	Municipalities of Bluewater and South Huron, Huron County
MTC File No.:	40EA044

Dear Meaghan Rivard:

This office has reviewed the above-mentioned addendum (the "Addendum"), which has been submitted to this ministry as required under O. Reg. 359/09, as amended (Renewable Energy Approvals under the *Environmental Protection Act*) (the "REA regulation"). This letter constitutes the Ministry of Tourism, Culture and Sport (the "Ministry") comments for the purposes of Section 23(3)(a) of the REA regulation regarding the supplemental heritage assessment undertaken for the above project.

The Addendum recommends the following:

A detailed inventory was undertaken to identify and evaluate potential heritage resources. Through a windshield survey, 86 sites 40 years of age or older were documented and evaluated according to Ontario Regulation 09/06. This included a total of 135 potential heritage resources; 67 residences and 68 barns or barn complexes. Of these, 99 (46 houses and 53 barns) were identified to have potential cultural heritage value or interest. Following the evaluation of anticipated impacts, both direct and indirect, according to InfoSheet #5 (MTC, 2006), no anticipated impacts were identified.

The Project Location was determined to represent a single cultural heritage landscape. Primarily mixed-use agricultural activity, it is consistent with the historic division of land and can be characterized by evolving cash crops, pasture, woodlots, social institutions and two transportation corridors. Due to the typical nature of the landscape, cultural heritage value or interest was not identified according to Ontario Regulation 9/06.

As there are no anticipated impacts to the cultural heritage features, no further work is recommended.

Based on the information contained in the Report, the Ministry is satisfied that the heritage assessment process and reporting are consistent with the applicable heritage assessment requirements established in s. 23 of O. Reg. 359/09. Please note that the Ministry makes no representation or warranty as to the completeness, accuracy or quality of the heritage assessment report (please see Note 1).

This letter does not waive any requirements under the *Ontario Heritage Act*.

This letter does not constitute approval of the renewable energy project. Approvals or licences for the project may be required under other statutes and regulations. Please ensure that you obtain all required approvals and/or licences.

Please ensure that the proponent is aware that, if new information or substantive project changes arise after issuance of this letter, the applicant should discuss them with you to determine if any additional assessment or reporting is required. If additional reporting or revisions are required, they should be submitted to the Ministry for review. Upon completion of that review, the Ministry will determine if any revisions to the content of this letter are required.

Should you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Joseph Muller
Heritage Planner

cc. Mr. Marc Rose, AECOM Canada Ltd.

Doris Dumais, Director
Environmental Approvals Access & Service Integration Branch, Ministry of the Environment

Agatha Garcia-Wright, Director
Environmental Approvals Branch, Ministry of the Environment

Chris Schiller, Manager
Culture Services Unit, Ministry of Tourism, Culture and Sport

Note 1: In no way will the Ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional heritage resources are identified or the Report is otherwise found to be inaccurate, incomplete, misleading or fraudulent.

Appendix B2. Additional Agency Comments

*Ausable Bayfield
Conservation Authority*

Memorandum

To	File	Page 1
CC	Vince Deschamps	
Subject	NextEra Waterbodies Component – Agency Consultation	
From	Nicola Lower and Sarah Aitken	
Date	May 5, 2011	Project Number 60156395

Nicola Lower and Sarah Aitken visited Ausable-Bayfield Conservation Authority (ABCA) and St Clair Region Conservation Authority (SCRCA) on May 3rd 2011. We met with the following staff during these meetings:

Andrew Bicknell, Regulations Co-ordinator, ABCA
Geoff Cade, Supervisor of Water & Planning, ABCA
Tracey Boitson, GIS/CAD Information Systems Specialist, ABCA
Dallas Cundick, Environmental Planner/Regulations Officer, SCRCA

1. Purpose of Visit

To review status of background data available within the three project areas (Goshen, Bluewater, Jericho); To obtain outstanding natural heritage background data; To review proposed aquatic work plan with CAs; To establish consultation process with CAs on the work program to aide in the permitting process.

2. Summary of ABCA Visit

We presented preliminary turbine layouts for all three project areas, and compared areas to ABCA Regulation mapping. We identified that there was a need to obtain accurate jurisdictional (watershed) boundaries. We identified the preliminary locations of several turbines in an area of floodplain (Thedford Klondyke floodplain). Current CA Regulations do not permit any development in these areas. However, staff did acknowledge that turbines may be permitted in these areas if studies can demonstrate no impact to flooding.

It was noted that the number of turbines would potentially result in a large number of permits and this could result in a significant timeline to review. AECOM ecologists discussed the idea of a blanket permit and this was positively received, but not agreed to as it will depend on final turbine layouts and site specific conditions. We discussed the format of such a blanket permit and AECOM ecologists will be developing generic standards for a number of parameters, such as widths of road corridors, watercrossing, transmission line installation, and associated mitigation and restoration plans. It was agreed that all watercourse crossings were to be culverts, either permanent or temporary, rather than

bridge structures. If we require review of the content of this report before final submission of the blanket permit, there will be a fee associated although ABCA has not determined this fee schedule yet.

The CA advised that turbines (including the buffer zone) should stay out of the Regulated Areas. Special attention should be paid to the Thedford-Klondyke floodplain (geotechnical/regulation issues), as well significant valley lands (slope stability issues, protected areas, natural hazard). ABCA noted that if site visits were required to assess impacts (i.e. turbine placements in regulated areas), this would significantly increase the review time for the permitting process.

There is a need to overlay Natural Heritage features, topography and CA regulation mapping to allow for appropriate constraint mapping. ABCA can provide the following:

- ABCA regulation map
- Jurisdictional boundary
- Hazards mapping
- Locally significant features
- Drain classification
- Fisheries info/thermal regimes
- SAR and water quality (if available)

ABCA requires a fee to provide this data and will be providing a cost estimate for approval.

ABCA stated that thermal regime of the watercourse along with habitat mapping would be critical to assessment of impacts, and fish community data would only be required if there was an absence of background data. ABCA have a Level 2 Agreement with Department of Fisheries and Oceans and can review applications for permits under the *Fisheries Act*. The CAs role in this project would largely be related to fisheries, aquatic and floodplain requirements. ABCA also envisage that the greatest impacts to watercourses are likely to arise from associated infrastructure rather than the turbines themselves.

It was noted that ABCA requirements may be very different to Ministry of the Environment (MOE) and they should also be fully consulted on their requirements under the REA.

3. Summary of SCRCA Visit

Some data has already been provided by SCRCA and the preliminary turbine layouts for Jericho were reviewed.

SCRCA agreed to a blanket permit with the same generic standards and mitigation, along with site-specific details where necessary. SCRCA would conduct site visits to review site specific conditions, possibly at the same time as AECOM ecologists. It was noted that fish community assessments are unlikely to be required, unless requested by MOE and MNR.

SCRCA will screen for Species at Risk when the turbine layouts are finalized.

SCRCA will provide AECOM with thermal regimes for watercourses, watercourse names, and locally significant areas.

There is a fee associated with permitting process and it was noted that current fees are \$50 per directional drill site and \$250 per culvert crossing.

4. Ministry of the Environment

After the meetings with the CA's Nicola Lower and Sarah Aitken contacted Shannon McNeil with MOE (May 5 2011) to follow-up with guidance previously provided regarding the waterbodies component. MOE confirmed that their process is completely different to that of the CA's and MNR and therefore requirements may differ. Workplans for the MOE will at the very least need to meet the basic REA guidelines. MOE will not provide information on the level of detail required this is down to the proponents professional opinion. Ecology staff need to ensure they have sufficient level of detail to provide MOE with enough information to assess negative impacts and the suggested mitigation. MOE are highly unlikely to request additional information (for example, more field surveys), provided the proponent has provided a comprehensive review of the site conditions, impacts and mitigation. MOE stated that the process has developed from that of the EA process, therefore they are very much focused on the 'big picture'.

5. Next Steps

The following outlines the next steps for the Waterbodies/Natural Heritage component of the NextEra Wind Energy Project.

- AECOM staff are working with the Conservation Authorities and MNR to obtain data/mapping
- Nicola and Sarah are finalizing the waterbody workplan for submittal and review by the agencies
- Prepare for field investigations and obtain any required permits to conduct studies.

Communication Record

Date	November 22, 2011	Time	11:30 a.m.
Between	Sarah Aitken	and	Geoff Cade
	AECOM		Ausable-Bayfield Conservation Authority
Telephone #	519-235-2610	Project #	60155032
Project Name	NextEra Wind Energy Project		
Subject	Re: Conservation Authorities Act and setback requirements		

I spoke with the Supervisor of Water and Planning - Geoff Cade from Ausable Bayfield Conservation Authority (ABCA) on November 21, 2011. The purpose of the phone call was to discuss the appropriate use of the CA setbacks as outlined in Ontario Regulation 147/06 Section (2b).

I informed him of the setbacks we have been using as outlined in the Technical Guide to Renewable Energy Approvals section 5.1 Setbacks of turbines located 30 m from a watercourse and the development of roads and collection lines within 30 m of a waterbody. I also indicated that we were implementing the 15 m setback outlined in O.Reg 147/06.

Geoff was concerned with the setbacks developed by MOE as these do not take into account local conditions, such as flood lines and potential erosion issues. When developing within the regulation limit, each setback will need to be assessed on site specific conditions. He indicated that for some sites a 30 m setback may not be enough to ensure there will be no flooding/erosion issues caused by the development. This will need to be done through a site visit with ABCA to each site we would like to develop within the Regulation Limit.

He also indicated that for a project of this size, it is likely that the permitting process will be lengthy.

Comments

Minutes of Meeting

Date of Meeting	July 11 th , 2012	Start Time	10:00	Project Number	60155032
Project Name	NextEra Wind Energy				
Location	Ausable Bayfield Conservation Authority (ABCA) Office – Exeter Ontario				
Regarding	Permitting layouts for the Bluewater and Goshen Wind Farms				
Attendees	Andrew Bicknell – ABCA Geoff Cade – ABCA Tom Bird – NextEra Gabe Henehan – NextEra Andrea Garcia – NextEra Travis Turner – NextEra Marc Rose – AECOM Sarah Aitken - AECOM				
Distribution	NextEra, ABCA and File				
Minutes Prepared By	Sarah Aitken				

PLEASE NOTE: If this report does not agree with your records of the meeting, or if there are any omissions, please advise, otherwise we will assume the contents to be correct.

Items of Discussion

1. Bluewater Permitting layout
2. Review of Goshen layout
3. Overview of construction details for wind farms
4. Project schedule and deliverables
5. Parkhill sub-station
6. Other

1. Bluewater Permitting Layout	Action
<ul style="list-style-type: none"> • ABCA has provided two types of boundaries that are applicable to this project, The Regulation Limit and Floodline Mapping. • The Regulation Limit identifies the area in which ABCA has jurisdiction and any works within this area will require authorization from ABCA. The regulation limit identifies hazard lands (i.e. floodline, valley lands) and wetland areas. • The Floodline mapping area identifies the floodline hazard which is contained within the regulation limit. The floodline mapping provided by ABCA contains two types of floodlines which allow ABCA to manage the regulations. <ol style="list-style-type: none"> 1 - Estimated floodline – the hatched floodline which is associated with regional storms and is delineated based on topography. This estimated floodline may be considered conservative. 2 - Engineered floodline – is the solid line and was identified through an engineering study 	

<ul style="list-style-type: none"> • If NextEra would like to further study the estimated floodline mapping to confirm or disagree, they would need to complete hydraulic modelling at their expense. 	
<ul style="list-style-type: none"> • ABCA is looking for a description of what would happen in terms of accessing the turbines for maintenance if a regional storm occurred and the implications of not being able to access those turbines • NextEra to provide documentation that states the turbines are self-sustaining and the risks associated with a flood will likely only affect maintenance activities. The turbines are controlled remotely and can be shut down if required. If a turbine needs to be shutdown, this will not create a cascade of issues for the entire wind farm. 	NextEra to provide written documentation to ABCA regarding flood risks
<ul style="list-style-type: none"> • ABCA would like to see flood proofing for the pad mount and underground box that contains the cables and transformers for turbines within the regulation limit (Turbines 40 and 41) • ABCA confirmed that no chemicals are to be stored within the floodplain 	
<ul style="list-style-type: none"> • ABCA will conduct a site visit of Turbine 40 and 41 to investigate the floodline mapping and field verify the site. • A Site visit to the substation and laydown area will be conducted to delineate the meander belt allowance. ABCA will identify the buffer distance from the watercourse and will flag the area for NextEra to survey. • NextEra will likely need to confirmation location of flood limits in vicinity of substation through either hydraulic modelling or routine engineering calculations to show design flow (rational method calculation); ABCA would need to review the Terms of Reference for the study 	<ul style="list-style-type: none"> • AECOM to coordinate with ABCA regarding transfer of shapefiles and landowner access • ABCA to flag meander belt allowance for NextEra
<ul style="list-style-type: none"> • ABCA staff confirmed that there is no concern with flood risk regarding the t-line. Therefore, NextEra can place hydro poles within the CA's regulation limit without requiring a permit provided that we span the watercourses and set the poles back a "reasonable" distance (e.g., based on industry best practices). • ABCA requested that the maximum span be centred over the watercourse. 	
<ul style="list-style-type: none"> • ABCA suggested that they will approve a corridor to allow flexibility of movement of infrastructure and construction in disturbance areas. ABCA will permit the worst case scenario. 	

2. Review of Goshen layout

	Action
<ul style="list-style-type: none"> • The permitting layout for Goshen was provided to ABCA for their review. The following turbines are within the regulation limit: Alt28, Alt30, 22, 57, 58, 59, 60, 61, 62 	ABCA to provide feedback regarding layout and any redflag issues
<ul style="list-style-type: none"> • Thedford-Klondyke Floodplain has engineered floodline mapping. There are two values associated with this floodline, a) the minimum flood elevation is 180.65 m and b) the preferred elevation is 181.00 m. • NextEra will need to show that the ABCA floodline elevation was taken into consideration in the design of the turbine and associated infrastructure. NextEra will need to include any flood line values on drawings. 	

<p>2. Review of Goshen layout</p> <ul style="list-style-type: none"> • There is an implementation policy for the Thedford-Klondyke floodplain; however, it does not address turbine placement. Turbines in the TK floodplain will need to be suitably floodproofed. 	<p>Action</p>
<p>3. Overview of construction details for wind farms</p> <ul style="list-style-type: none"> • ABCA requested that all materials from clearing and grubbing be removed and stored outside of the regulation limit, unless otherwise approved by ABCA. Any soils or materials stored within the regulation limit can impact flood storage and capacity. • Ensuring that materials are removed from the regulation limit will streamline the permitting process. ABCA would also like NextEra to be careful where materials from the clearing and grubbing are taken. ABCA would prefer if the materials are not given to private landowners as this may cause issues with infilling of sensitive areas. 	<p>Action</p>
<p>4. Project schedule and deliverables</p> <ul style="list-style-type: none"> • ABCA will likely require a retainer prior to the start of their review for all three projects to allow the CA to staff the projects appropriately. • ABCA will provide a database to NextEra for AECOM to populate with information based on landowner information, proposed construction works and mitigation measures. This will allow ABCA to easily issue permits. • ABCA typically issues a 12 month permit, if permit expires, there is the option for renewal. ABCA will need authorization from landowners to issue the permit. • ABCA to look into an 18 month permit. 	<p>Action</p> <p>ABCA to provide database to NextEra/AECOM</p>
<p>5. Parkhill sub-station</p> <ul style="list-style-type: none"> • ABCA to look into whether Hydro One Networks Inc. (HONI) needs to obtain CA permits or if they are exempt 	<p>Action</p> <p>ABCA to look into permit requirements for HONI</p>
<p>6. Other</p> <ul style="list-style-type: none"> • AECOM to follow up with DFO regarding the recent federal changes to the Fisheries Act. • ABCA will conduct review of Fisheries Act on behalf of DFO and will issue Letter of Advice. 	<p>Action</p> <p>AECOM to contact DFO</p>

Minutes of Meeting

Date of Meeting	December 19, 2012	Start Time	10:00	Project Number	60155032
Project Name	NextEra Wind Energy				
Location	Ausable Bayfield Conservation Authority Office and Conference Call				
Regarding	Goshen Study Area Layout and Bluewater ABCA Permitting				
Attendees	Andrew Bicknell - ABCA Tom Bird - NextEra Andrea Garcia - NextEra Rob Cascaden - IBI Group Marc Rose - AECOM Sarah Aitken - AECOM				
Distribution	Attendees and file				
Minutes Prepared By	Sarah Aitken				

PLEASE NOTE: If this report does not agree with your records of the meeting, or if there are any omissions, please advise, otherwise we will assume the contents to be correct.

Goshen Study Area	Action
<ul style="list-style-type: none"> • ABCA has reviewed the Goshen Layout and will provide a formal write-up after the meeting. Summary of findings below: <ul style="list-style-type: none"> ○ Alt 28 (T82) is located completely within the ABCA floodplain - similar to BLW T40 and T41 ○ T22 is located close enough to floodplain mapping that there isn't a level of comfort that turbine is not within. Recommend a floodplain analysis for this location. ABCA recommends looking at the size of the catchment to determine type of system. If small catchment area a full floodplain analysis may not be required. ABCA recommends pre-consultation prior to initiation of study to scope out requirements. ○ there are several turbines that are located outside of the floodplain (still within regulation limit) and would require a site visit by ABCA to determine if a hydrology study is required. In addition, topography, relief and catchment will be reviewed to determine study requirements. These include: T17, T86 (Alt 32), T33, T41 	<ul style="list-style-type: none"> -ABCA to provide formal feedback for Goshen layout. -S. Aitken to provide Turbine numbers to ABCA.
<ul style="list-style-type: none"> • there are several access roads that are located near watercourses. ABCA has requested a 15 m setback from top of bank. Municipal drains may require specific setback. If road is located closer than 15 m to top of bank, may need to consider erosion study. 	R. Cascaden to determine setback for municipal drains.
<ul style="list-style-type: none"> • ABCA would like to know if an existing access road will be used for T16? 	NextEra to provide details.

Goshen Study Area	Action
<ul style="list-style-type: none"> • within the ABCA engineered floodplain, there are 8 turbines T57-T62, and two located just outside T84 and T63. All of these turbines will require flood proofing. ABCA would like to know if there are any additional guiding codes for electrical infrastructure that NextEra needs to adhere to. • ABCA will rely on engineering to ensure turbines are floodproof and that other regulations have been considered. • no additional floodplain analysis required for this area, however may need to survey for topographical data. 	<p>- ABCA to provide memo outlining floodproofing details to meet ABCA requirements. -NextEra to provide other regulations, codes or standards to electrical equipment.</p>
<ul style="list-style-type: none"> • Goshen project schedule is currently arranged so that the ABCA permit is aligned with the REA approval. REA approval is anticipated for September 2013, therefore application submission to ABCA to allow for sufficient review time will be April/May 2013. 	<p>S. Aitken to send Goshen Water Body report to ABCA.</p>

Bluewater Study Area	Action
<ul style="list-style-type: none"> • for infrastructure located within the ABCA regulation limit and within the Municipal ROW, permit needs to be tied to landowner with written consent. NextEra will be acting as agent on behalf of the landowners. 	
<ul style="list-style-type: none"> • Road use agreement will be obtained by municipality later in the process, however ABCA will issue permit without the roaduse agreement and NextEra can provide once agreements are in place. A condition of the permit will be that no work is to occur until the roaduse agreement is in place. 	<p>NextEra to obtain road use agreements.</p>
<ul style="list-style-type: none"> • there are several municipal drains located within the study area. Culverts proposed to be installed within municipal drains will need to be approved under the Drainage Act, Section 78. This approval may take several months to obtain. • ABCA needs the size and length of the culverts for all sites. • Generic information and general details can be submitted to ABCA for their review prior to approval of the Drainage Report by Council. Once the Drainage Report is approved, ABCA will be notified and provided a copy for completion of the permit. ABCA willing to work with this approach. • ABCA does not require topographic surveys for each culvert crossing but they are required for the Drainage Reports. 	
<ul style="list-style-type: none"> • ABCA has request generic details for all regulated activities (access roads, culverts, collection lines, substation and laydown areas) to be submitted as soon as possible. ABCA will provide formal feedback once generic designs have been submitted. 	<p>Generic details to be submitted to ABCA mid January (IBI).</p>
<ul style="list-style-type: none"> • BLW CA permit has been aligned with receiving the REA approval in March. Construction to begin in May 2013. 	

Bluewater Study Area	Action
<ul style="list-style-type: none"> AECOM to provide additional sites within ROW to ABCA for permitting. 	S. Aitken will update ABCA spreadsheet with these locations.
<ul style="list-style-type: none"> for Collection lines that are located within the ROW and are directionally drilled under culvert - no permit required, if drilled under watercourse, permit likely required. 	
<ul style="list-style-type: none"> ABCA would like to receive an approximate construction schedule for the individual works (e.g. order of construction of culverts, roads, etc.) 	

ABCA Permitting	Action
<ul style="list-style-type: none"> permits will be issued based on landowner parcel. if one parcel contains several types of infrastructure one permit will be issued for all. 	
<ul style="list-style-type: none"> include floodproofing details and topographical data on site plan. 	
<ul style="list-style-type: none"> ABCA request that text regarding site access to turbines during flooding events be included within the permit application. 	

*Upper Thames River
Conservation Authority*

Owen, Jennifer

From: Karen Winfield [WinfieldK@thamesriver.on.ca]
Sent: Friday, March 16, 2012 4:17 PM
To: Owen, Jennifer
Cc: Andrew Bicknell; Geoff Cade
Subject: UTRCA Comments - Goshen Wind Energy Centre, South Huron
Attachments: UTRCA Comments - Goshen Wind Energy Centre, South Huron.pdf; Goshen Transmission Line Study Area - (1 of 4) - Natural Hazards.pdf; Goshen Transmission Line Study Area - (2 of 4) - Natural Heritage.pdf; Goshen Transmission Line Study Area - (3 of 4) - DWSP - HVA.pdf; Goshen Transmission Line Study Area - (4 of 4) - DWSP - SGRA.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Red Category

Hi Jennifer,

Please see attached UTRCA comments and Regulation Limit mapping regarding the proposed Goshen Wind Energy Centre, Municipality of South Huron.

To save paper wastage we are providing these comments via e-mail pdf only. Should you require a hard-copy, please let me know and we will drop one in snail-mail for you as well.

Thank-you,

Karen Winfield

Land Use Regulations Officer

1424 Clarke Road London, Ontario, N5V 5B9

519.451.2800 Ext. 237 | Fax: 519.451.1188

winfieldk@thamesriver.on.ca



March 16, 2012

AECOM
300 Town Centre Blvd., Suite #300
Markham, Ontario
L3R 5Z6

Attention: Jennifer Owen – (via e-mail: Jennifer.Owen@aecom.com)

Dear Ms. Owen:

**Re: Information Request
Renewable Energy Project
Goshen Wind Energy Centre
Municipality of South Huron**

Upper Thames River Conservation Authority (UTRCA) staff are in receipt of your e-mail (dated March 13, 2012), attached "Goshen Transmission Line Study Area" map (dated January 2012) and "Request for Information" regarding the proposed Goshen Wind Energy Centre, Municipality of South Huron. Please note that given the broad study area chosen, we are unable to provide detailed technical comments at this time. However, we appreciate being contacted early in the process and are always open to meeting with you to discuss and work through any concerns or complications along the way.

According to the enclosed project location mapping, portions of the project may traverse though natural hazard areas regulated by the Conservation Authority. Our mapping shows that only a small portion of the study area falls within the boundaries of our watershed. We have attached a copy of this mapping for your information. The approximate location of our watershed boundary is outlined in black. Further west of our watershed boundary, the larger portion of the project will fall under the jurisdiction of the Ausable Bayfield Conservation Authority (ABCA). We recommend you contact ABCA directly regarding that portion of the project.

Digital Mapping

Our staff can provide digital mapping which outlines the boundaries of the natural heritage and natural hazard features present within the UTRCA portion of the study area. Ideally, these natural heritage and natural hazard features should be identified in the Renewable Energy Approval Documents and avoided as inappropriate places for development. Our natural heritage and natural hazard features digital mapping may be obtained by contacting our GIS department (contact: Phil Simm, 519-451-2800 x 247). Generally the fee involved with obtaining digital mapping of our natural heritage and natural hazard features is \$100.

Conservation Authorities Act Section 28 Permits

Please note that depending on project specifics, Section 28 permits may be required for any portion of the works occurring within the Regulation Limit. Permits will be required for any watercourse crossing structures, directional drilling beneath a watercourse to facilitate the inter facility connection line or any other cable trench and conduit installation and any other work that may occur within the regulation limit.

The UTRCA regulates development within the Regulation Limit in accordance with Ontario Regulation 157/06 made pursuant to Section 28 of the *Conservation Authorities Act*. This regulation requires proponents to obtain written approval from the UTRCA prior to undertaking any works in the regulated area including filling, grading, construction, alteration to a watercourse and/or interference with a wetland.

Please note that our scope of review is based on the policies set out in the Upper Thames River Conservation Authority Planning Policy Manual (June 28, 2006). Detail design project review for the Goshen Wind Energy Centre project would generally be guided by, but not limited to, natural heritage, natural hazard, and pollution prevention areas of concern for lands regulated within our jurisdiction.

Fish Habitat

In answer to your question regarding fish habitat within the study area, please note that Fish Creek and its tributaries would be considered fish habitat – mainly warmwater. Detailed fish/mussel records and benthic invertebrate data for the study area is available from our office for a fee. This information and a quote for the applicable fee may be obtained by contacting our Aquatic Biology Technician (contact: Cathy Reeves, 519-451-2800 x 283).

Water Quantity

Unfortunately there is no stream flow gauge on Fish Creek so background flow information for this system is lacking. Any water extraction or in-stream works related to the project should ensure the natural flow regime is maintained or enhanced for downstream needs of both the aquatic environment and human consumption.

Areas of Natural or Scientific Interest

Our data indicates one currently documented Area of Natural or Scientific Interest (ANSIs) located within the study area at the Town of Kirkton. However, the Ontario Ministry of Natural Resources would be the agency responsible for ANSI data and the one to contact directly regarding ANSI information.

Species At Risk

Our data further indicates the potential presence of federally and/or provincially protected aquatic species at risk within the project study area. Federally, there are fish/mussel species at risk present within Fish Creek through the study area. Provincially, the Ontario Ministry of Natural Resources

would be the agency responsible for Endangered Species Act (ESA) data and the one to contact directly regarding provincial species at risk.

Water Quality, Woodlands and Other Natural Heritage Features

The Goshen Wind Energy Centre study area lies within a portion of the Fish Creek subwatershed. Please refer to our latest (2007) edition of the Upper Thames River Watershed Report Cards – [Fish Creek] for information related to water quality, woodlands and other natural heritage features, available on our website at:

www.thamesriver.on.ca/Watershed_Report_Cards/images_2007/Report_Cards_Fish.pdf

Please note: We are also providing Drinking Water Source Protection information for all projects occurring in areas identified as vulnerable. To that end, please review the attached Drinking Water Source Protection information (Appendix A).

We would appreciate receiving information and reports as they become available in order to ensure that we can meet the project deadlines with our comments.

Yours truly,
UPPER THAMES RIVER CONSERVATION AUTHORITY



Karen M. Winfield
Land Use Regulations Officer

- Encl. - Appendix A (Drinking Water Source Protection Information applicable to the Goshen Wind Energy Centre Project, Municipality of South Huron)
- UTRCA Regulation Limit mapping for the Goshen Wind Energy Centre Project – Map 1 of 4 – Outlining Natural Hazard Features
 - UTRCA Regulation Limit mapping for the Goshen Wind Energy Centre Project – Map 2 of 4 – Outlining Natural Heritage Features
 - UTRCA Regulation Limit mapping for the Goshen Wind Energy Centre Project – Map 3 of 4 – Outlining Drinking Water Source Protection Features – Highly Vulnerable Aquifers
 - UTRCA Regulation Limit mapping for the Goshen Wind Energy Centre Project – Map 4 of 4 – Outlining Drinking Water Source Protection Features – Significant Groundwater Recharge Areas

(Please note: maps should be printed landscape on legal size (8 ½ x 14 inch) paper for scales to be accurate).

c.c. – Geoff Cade, ABCA – (via e-mail: gcade@abca.on.ca)
Andrew Bicknell, ABCA – (via e-mail: abicknell@abca.on.ca)

Appendix A – Drinking Water Source Protection Information applicable to the Goshen Wind Energy Centre Project, Municipality of South Huron

DRINKING WATER SOURCE PROTECTION

The *Clean Water Act* (CWA), 2006 is intended to protect existing and future sources of drinking water. The Act is part of the Ontario government's commitment to implement the recommendations of the Walkerton Inquiry as well as protecting and enhancing human health and the environment. The CWA sets out a framework for source protection planning on a watershed basis with Source Protection Areas established based on the watershed boundaries of Ontario's 36 Conservation Authorities. The Upper Thames River, Lower Thames Valley and St. Clair Region Conservation Authorities have entered into a partnership for The Thames-Sydenham Source Protection Region. Drinking Water Source Protection represents the first barrier for protecting drinking water including surface and ground water from becoming contaminated or overused thereby ensuring a sufficient, clean, safe supply now and for the future.

Assessment Reports:

The Thames-Sydenham Source Protection Region has prepared *Assessment Reports* which contain detailed scientific information that:

- identifies vulnerable areas associated with drinking water systems;
- assesses the level of vulnerability in these areas; and
- identifies activities within those vulnerable areas which pose threats to the drinking water systems, and assess the risk due to those threats.

The Assessment Report for the Upper Thames watershed delineates three types of vulnerable areas: Wellhead Protection Areas, Highly Vulnerable Aquifers and Significant Groundwater Recharge Areas. We wish to advise that the project study area contains areas identified as being Highly Vulnerable Aquifers and Significant Groundwater Recharge Areas.

Mapping which shows these areas is available at:

Highly Vulnerable Aquifers:

http://www.sourcewaterprotection.on.ca/downloads/assessment_reports/UTRCA/Appendices/A1-Maps/Map4-3-2_Highly%20Vulnerable%20Aquifers.pdf

Significant Groundwater Recharge Areas

http://www.sourcewaterprotection.on.ca/downloads/assessment_reports/UTRCA/Appendices/A1-Maps/Map4-2-2%20SGRA%20Vulnerability.pdf

Source Protection Plans:

Using the information in the Assessment Report, a Source Protection Plan is being developed for the Upper Thames watershed. It is anticipated that this Plan will consist of a range of policies that together, will reduce the risks posed by the identified water quality and quantity threats in the vulnerable areas. These policies will include a range of voluntary and regulated approaches to manage or prohibit activities which pose a threat to drinking water. Activities that can lead to; low, medium and significant threats have been identified in Appendix 10 of the Upper Thames River Source Protection Area Assessment Report, dated August 12, 2011. Available at:

http://www.sourcewaterprotection.on.ca/downloads/assessment_reports/UTRCA/Appendices/A10-Threats%20and%20Risk%20Assessment.pdf

AREA OF VULNERABILITY	VULNERABILITY SCORE	THREATS CIRCUMSTANCES &
Highly Vulnerable Aquifer (HVA)	6	Moderate and Low threats
Significant Groundwater Recharge Area (SGRA)	2, 4 & 6	Moderate & Low threats
Wellhead Protection Area (WHPA)	n/a	Significant, Moderate and Low threats

NOTE: Certain Activities within this study area may be considered *Moderate or Low* threats to drinking water.

As indicated, the *Source Protection Plan* is currently being developed and as such, the UTRCA cannot speculate what the *Plan* might dictate for such areas. Under the CWA, the Source Protection Committee has the authority to include policies in the *Source Protection Plan* that may prohibit or restrict activities identified as posing a *significant threat* to municipal drinking water supplies. Municipalities may also have or be developing policies that apply to vulnerable areas when reviewing development applications. Proponents considering land use changes, site alteration or construction in these areas need to be aware of this possibility.

Communication Record

Date	November 5, 2012	Time	16:04
Between	Karen Winfield (Land Use Regulations Officer)	and	Sarah Aitken
	Upper Thames River Conservation Authority		AECOM
Telephone #	519-451-2800	Project #	60155032
Project Name	NextEra– Goshen Wind Energy Centre		
Subject	UTRCA permitting requirements for the Goshen Wind Energy Centre		

PLEASE NOTE: If this communication record does not agree with your records of the meeting, or if there are any omissions, please advise. Otherwise it will be assumed that the contents of this record are correct.

Comments

S. Aitken spoke with Karen Winfield from the Upper Thames Conservation Authority (UTRCA) regarding permitting requirements under Ontario Regulation 157/06 - *Development, Interference with Wetlands and Alterations to Shorelines and Watercourses* for the Goshen Wind Energy Centre.

Karen identified three watercourse crossings located within the transmission line study area, within the UTRCA jurisdiction. These watercourses are described as small systems and UTRCA has no major concerns with the installation of the transmission line, given that transmission line poles are setback 15 m from the watercourse Top of Bank. If this setback is applied there will likely be no requirement for a permit. If the setback cannot be obtained, the crossing will require review by UTRCA to determine if a permit is required under O. Reg 157/06. UTRCA would like to review the detailed designs once they are complete to ensure that UTRCA is satisfied with the setback. If the 15 m setback is met, UTRCA will provide a letter indicating no permits are required.

UTRCA identified several woodlots that run adjacent to the transmission line within the back country route and request that they be avoided. Karen sent a map of the woodlots she was concerned about. AECOM indicated that they would pass the message along to the Terrestrial Ecologists coordinating the NHA.

Department of National Defense

From: MARIO.LAVOIE2@forces.gc.ca
Sent: Monday, January 09, 2012 9:18 AM
To: Vogliano, Jaclyn
Cc: +WindTurbines@forces.gc.ca
Subject: FW: Proposed Huron County Wind Farm - NextEra Energy Canada
Attachments: ONGoshen_NextEraEnergy_TelecommReview_2012-01-06.pdf
Categories: Red Category

I have reviewed your proposal in respect to DND's radio communication systems, and I have no objections or concerns.

Thank you for coordinating with DND.

Have a good Day.

Mr. Mario Lavoie
Spectrum Engineering Technician
National Defence | Défense nationale
Ottawa, Canada K1A 0K2
mario.lavoie2@forces.gc.ca
Telephone | Téléphone 613-992-3479
Facsimile | Télécopieur 613-991-3961
Government of Canada | Gouvernement du Canada

From: Vogliano, Jaclyn [<mailto:Jaclyn.Vogliano@fpl.com>]
Sent: Friday, 6, January, 2012 11:26 AM
To: +WindTurbines@ATESS@TRENTON; Lavoie MJ@ADM(IM) J6 Coord@Ottawa-Hull
Subject: Proposed Huron County Wind Farm - NextEra Energy Canada

Department of National Defense:

Please find attached request for review of a proposed wind farm in Huron County, Ontario named Goshen. We are looking for specific feedback on the potential impact to your telecommunications operations. Thank you for your consideration and timely response.

Jaclyn Vogliano
Wind Farm Optimization Analyst
NextEra Energy Resources
700 Universe Blvd.
Juno Beach, FL 33408
Office: 561.304.5778
Jaclyn.Vogliano@nexteraenergy.com



**Telecommunications Interference Consultation Request
Goshen Wind Farm Project**

Date: January 06, 2012

Project: Goshen Wind Farm Project

County: Huron County

Province: Ontario

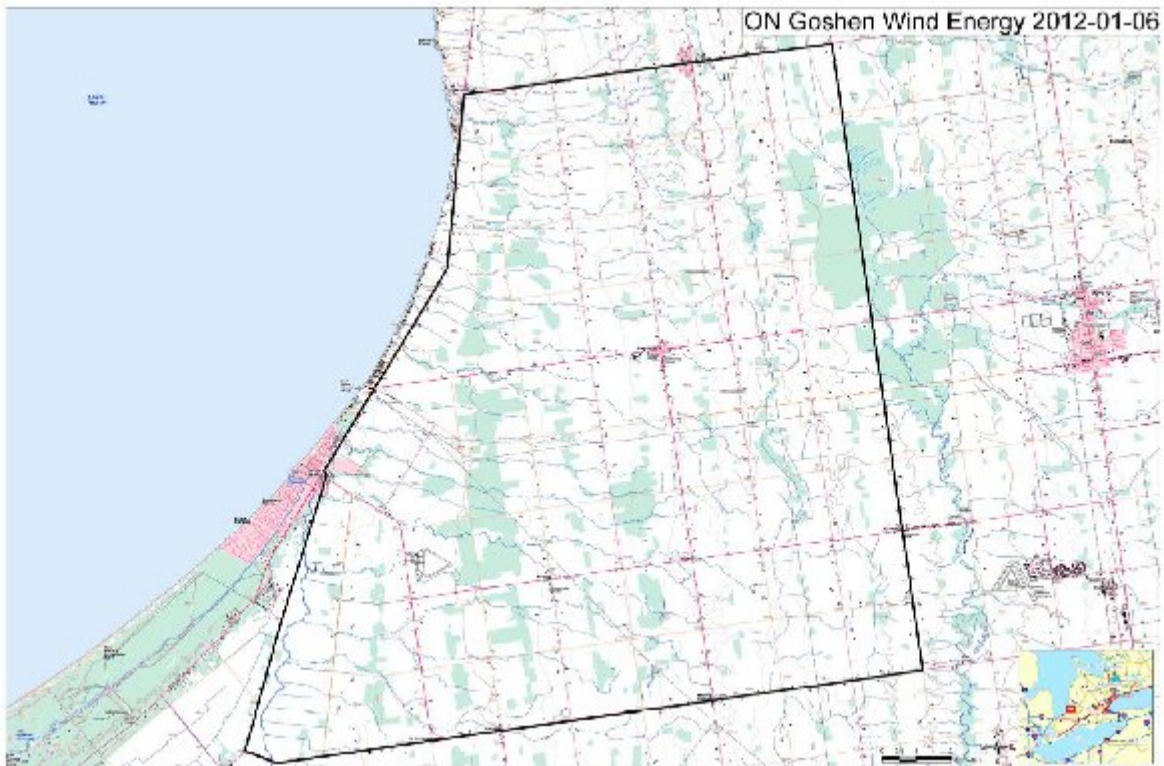
Project Sponsor: NextEra Energy Canada

Consultation Request: As a supplemental notice of the Goshen Wind Farm Project, NextEra Energy would like to provide information to ensure all communications related to your operations are not impacted. We kindly request your review of the project area (shown below), and a brief response containing your concerns or approval of NextEra Energy's proposal. Please submit your comments or questions to the correspondents below. More information on the proposed turbine locations can be provided upon request. We look forward to working with you in designing an unobtrusive and effective wind farm.

Turbine Description:

Number of Turbines: 63
Turbine Hub Height AGL (meters): 80
Turbine Blade Diameter (meters): 100
Maximum Blade Tip Height AGL (meters): 130

Map:



Project Boundary Vertex Coordinates		
VertexID	Latitude	Longitude
0	43.412195	-91.706664
1	43.366648	-91.712126
2	43.313655	-91.755593
3	43.312272	-91.754009
4	43.239817	-91.783229
5	43.236749	-91.771644
6	43.262413	-91.540379
7	43.426338	-91.574499

Table 1: The proposed Goshen Wind Energy project boundary in NAD83 decimal degree format

Submit Comments to:

Jaclyn Vogliano
Analyst – Wind Farm Optimization
NextEra Energy Resources, LLC
700 Universe Blvd.
Juno Beach, FL 33458
Phone: (561) 304-5778
Fax: (561) 691-7319
Email: Jaclyn.Vogliano@nexteraenergy.com

With CC to:

Mr. Thomas Bird
Project Manager, Environmental Services
NextEra Energy Canada, ULC
5500 North Service Road, Suite 205
Burlington, Ontario L7L 6W6
Phone: (905) 335-4904 x15
Fax: (905) 335-5731
Email: Thomas.Bird@nexteraenergy.com

From: ADIN.SWITZER@forces.gc.ca
Sent: Tuesday, January 24, 2012 10:23 AM
To: Vogliano, Jaclyn
Cc:
Subject: Detailed Analysis - No Interference - Goshen Wind Energy, Huron County, On. - WTA-2005
Attachments: ONGoshen_NextEraEnergy_TelecommReview_2012-01-06.pdf

Jaclyn,

We have completed the detailed analysis of your proposed site, Goshen Wind Energy, located in Huron County, Ont (WTA-2005). The results of our detailed analysis have shown that there is likely to be no interference with DND radar and flight operations. Therefore, as a result of these findings we have no objections with your project as submitted (attached). Should there be any changes to the site please re-submit the proposal for another assessment using the assigned WTA number listed above. Thank you for your patience on this matter and for considering DND radar and airport facilities in your project development process. If you have any questions feel free to contact me.
Thank you.

<<ONGoshen_NextEraEnergy_TelecommReview_2012-01-06.pdf>>

Adin Switzer

Capt

AEC Liaison Officer

CCISF/ESICC

ATESS/ESTTMA

Défense nationale | National Defence

8 Wing Trenton, Astra, ON K0K 3W0

TEL: 613 392-2811 Ext4834 (CSN: 827-4834)

FAX: 613 965-3200

Gouvernement du Canada | Government of Canada ü Please consider the environment before printing this email | S'il vous plaît pensez à l'environnement a



**Telecommunications Interference Consultation Request
Goshen Wind Farm Project**

Date: January 06, 2012

Project: Goshen Wind Farm Project

County: Huron County

Province: Ontario

Project Sponsor: NextEra Energy Canada

Consultation Request: As a supplemental notice of the Goshen Wind Farm Project, NextEra Energy would like to provide information to ensure all communications related to your operations are not impacted. We kindly request your review of the project area (shown below), and a brief response containing your concerns or approval of NextEra Energy's proposal. Please submit your comments or questions to the correspondents below. More information on the proposed turbine locations can be provided upon request. We look forward to working with you in designing an unobtrusive and effective wind farm.

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Number of Turbines: 63
Turbine Hub Height AGL (meters): 80
Turbine Blade Diameter (meters): 100
Maximum Blade Tip Height AGL (meters): 130

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7	43.426338	-91.574499

Table 1: The proposed Goshen Wind Energy project boundary in NAD83 decimal degree format

Submit Comments to:

Jaclyn Vogliano
Analyst – Wind Farm Optimization
NextEra Energy Resources, LLC
700 Universe Blvd.
Juno Beach, FL 33458
Phone: (561) 304-5778
Fax: (561) 691-7319
Email: Jaclyn.Vogliano@nexteraenergy.com

With CC to:

Mr. Thomas Bird
Project Manager, Environmental Services
NextEra Energy Canada, ULC
5500 North Service Road, Suite 205
Burlington, Ontario L7L 6W6
Phone: (905) 335-4904 x15
Fax: (905) 335-5731
Email: Thomas.Bird@nexteraenergy.com

Environment Canada

From: Rennie,Carolyn [Ontario] <Carolyn.Rennie@ec.gc.ca>
Sent: Thursday, February 09, 2012 1:20 PM
To: Vogliano, Jaclyn; Weather Radars Contact,National Radar Program [Ontario]
Subject: RE: Proposed Huron County Wind Farm - NextEra Energy Canada

Dear Ms. Jaclyn Vogliano,

Thank you for contacting the Meteorological Service of Canada, a branch of Environment Canada, regarding your wind energy intentions.

Our assessment of the information provided to us via email on January 6, 2012 indicates that interference created by the Goshen in Huron County will adversely impact our Exeter weather radar, causing the following problem(s):

1. significant Doppler interference
2. multi-path scattering reflections

Upon consulting with Environment Canada's severe weather forecasting group and the radar science group, we believe that interference from the wind farm **cannot** be filtered out by our existing processing system. This interference would reduce the radar's monitoring capabilities with respect to severe weather warnings and ultimately, the public's safety and security.

Our opinion is that the Goshen wind farm would not effectively co-exist with the Exeter weather radar as currently proposed.

We look forward to any potential mitigation discussions.

Please contact us at: weatherradars@ec.gc.ca

Best Regards,

Carolyn J. Rennie

Student - National Radar Program
Supervisor - Stephen Holden
Meteorological Service of Canada
Environment Canada
4905 Dufferin Street
Toronto, Ontario M3H 5T4
Phone : 416-739-4931
Cell : 289-221-1084

Carolyn J. Rennie

Etudiant - Le Programme Nationale de Radar
Directeur - Stephen Holden
Service météorologique du Canada
Environnement Canada
4905, rue Dufferin
Toronto, Ontario M3H 5T4

Téléphone : 416-739-4931
Cellulaire : 289-221-1084

From: Vogliano, Jaclyn [<mailto:Jaclyn.Vogliano@fpl.com>]
Sent: Friday, January 06, 2012 11:25 AM
To: Weather Radars Contact,National Radar Program [Ontario]
Subject: Proposed Huron County Wind Farm - NextEra Energy Canada

Environment Canada:

Please find attached request for review of a proposed wind farm in Huron County, Ontario named Goshen. We are looking for specific feedback on the potential impact to your telecommunications or radar operations. Thank you for your consideration and timely response.

Jaclyn Vogliano
Wind Farm Optimization Analyst
NextEra Energy Resources
700 Universe Blvd.
Juno Beach, FL 33408
Office: 561.304.5778
Jaclyn.Vogliano@nexteraenergy.com

Hydro One

Owen, Jennifer

From: Andrew.BRISKIN@HydroOne.com
Sent: Thursday, July 15, 2010 3:26 PM
To: Cushing, Julia
Subject: RE: Setback guidelines

Julia,

Further to our previous discussion, the table below represents recommended Setback distances measured from the edge of a transmission right-of-way (ROW) to wind turbines.

Setback	Transmission Line Voltage Level		
	500 kV	230 kV	115 kV
Above 50kW	500m	250m	Highest of 150m or total height + 10m
Below 50kW	500m	250m	150m

Andrew Briskin
Tx Sustainment - System Investment
Hydro One Networks Inc.

TCT-15 A10
1-(416)-345-4285

This email and any attached files are privileged and may contain confidential information intended only for the person or persons named above. Any other distribution, reproduction, copying, disclosure, or other dissemination is strictly prohibited. If you have received this email in error, please notify the sender immediately by reply email or delete the transmission received by you.

From: Cushing, Julia [<mailto:Julia.Cushing@aecom.com>]
Sent: Thursday, July 15, 2010 10:49 AM
To: BRISKIN Andrew
Subject: Setback guidelines

Hi Andrew,

Thank you for responding so quickly to this request. Could you please provide me with the setback guidelines for wind turbines to transmission ROWs?

Thank you.

Julia

Julia Cushing
Environmental Planner
Julia.Cushing@aecom.com



Enter your office # code and F3 key – address will populate (**delete this yellow highlighted text** – remove any yellow highlight if appears in the address)

Communication Record

Date	July 19, 2010	Time	
Between	Julia Cushing	and	Adam Ostrowski
	AECOM		Hydro One
Telephone #		Project #	60119704
Project Name	NextEra Wind Energy Projects		
Subject	ROW widths for Transmission Lines		

PLEASE NOTE: If this communication record does not agree with your records of the meeting, or if there are any omissions, please advise. Otherwise it will be assumed that the contents of this record are correct.

Comments

Adam indicated that the standard ROW widths for transmission lines are as follows:

- 115kV – 50 feet on either side of the centre line
- 230 kV – 75 feet on either side of the centre line
- 500 kV – single circuit – 110 feet on either side of the centre line
- 500 kV – double circuit – 125 feet on either side of the centre line

Owen, Jennifer

From: w.d.kloostra@HydroOne.com
Sent: Wednesday, April 27, 2011 3:52 PM
To: Cushing, Julia
Subject: RE: Setback Distances from transmission ROWs

Julia,
The guideline below still holds true.
By the way, Les has left, with myself as his replacement.
Regards

Walter D. Kloostra, P.Eng.
Mgr., Transmission Lines Sustainment
Sustainment Investment Planning - Asset Management

p(416)345-5114
c(416)432-8761

w.d.kloostra@HydroOne.com

From: Cushing, Julia [<mailto:Julia.Cushing@aecom.com>]
Sent: Wednesday, April 20, 2011 10:25 AM
To: KOCH Leslie
Subject: Setback Distances from transmission ROWs

Hi Les,

I left you a voicemail a few months ago regarding setback distances from Hydro One ROWs to wind turbines. I received the recommended setback distances below from Andrew Briskin in July. It was my understanding that Hydro One was still determining a corporate standard for setback distances at that time. Could you confirm if there is any new information regarding this matter?

Thank you,

Julia

Julia Cushing
Environmental Planner
Julia.Cushing@aecom.com

AECOM
300 Town Centre Boulevard, Suite 300
Markham, Ontario, Canada L3R 5Z6
T 905-477-8400 ext 448 F 905-477-1456
www.aecom.com

From: Andrew.BRISKIN@HydroOne.com [<mailto:Andrew.BRISKIN@HydroOne.com>]

Sent: Thursday, July 15, 2010 3:26 PM

To: Cushing, Julia

Subject: RE: Setback guidelines

Julia,

Further to our previous discussion, the table below represents recommended Setback distances measured from the edge of a transmission right-of-way (ROW) to wind turbines.

Setback	Transmission Line Voltage Level		
	500 kV	230 kV	115 kV
Above 50kW	500m	250m	Highest of 150m or total height + 10m
Below 50kW	500m	250m	150m

Andrew Briskin

Tx Sustainment - System Investment

Hydro One Networks Inc.

TCT-15 A10

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From: Cushing, Julia [<mailto:Julia.Cushing@aecom.com>]

Sent: Thursday, July 15, 2010 10:49 AM

To: BRISKIN Andrew

Subject: Setback guidelines

Hi Andrew,

Thank you for responding so quickly to this request. Could you please provide me with the setback guidelines for wind turbines to transmission ROWs?

Thank you.

Julia

Julia Cushing

Environmental Planner

Julia.Cushing@aecom.com

AECOM

300 Town Centre Boulevard, Suite 300

Markham, Ontario, Canada L3R 5Z6

Ministry of the Environment



Enter your office # code and F3 key – address will populate (~~delete this yellow highlighted text~~ – remove any yellow highlight if appears in the address)

Communication Record

Date	July 30, 2010	Time	
Between	Julia Cushing	and	Jessica Mayer
	AECOM		MOE
Telephone #		Project #	60119704
Project Name	NextEra Wind Energy Projects		
Subject	DRAFT PDR Requirements		

PLEASE NOTE: If this communication record does not agree with your records of the meeting, or if there are any omissions, please advise. Otherwise it will be assumed that the contents of this record are correct.

Comments

- Jessica indicated that the DRAFT PDR's would only be considered sufficient in order for the MOE to provide a list of potentially affected Aboriginal Communities if they included:
 - A specific nameplate capacity
 - A specific turbine make and model
- Julia indicated that it was AECOM's understanding that it would be acceptable to have an "upper limit" for nameplate capacity at this stage as the number of turbines to be sited will not be known until the siting exercises have been completed. This will also depend of the environmental and noise assessments.
- Julia also indicated that at this point, two turbine models are being considered and a turbine model will be selected following the various baseline studies.
- Jessica indicated that this information was required as they needed to provide the Aboriginal Communities with a "footprint" of the Project.

Owen, Jennifer

From: McNeill, Shannon (ENE) [Shannon.McNeill@ontario.ca]
Sent: Wednesday, March 30, 2011 1:36 PM
To: Aitken, Sarah
Subject: RE: REA - Waterbodies component

Hi Sarah,

Here are some answers to your questions which we spoke about on the 28th:

1. For the water quality component are we required to collect in-situ or lab samples to satisfy MOE? Or are these just field observations of potential impacts?

MOE does not require lab samples for the waterbodies report/water assessment. Mostly we are looking for background information that can be done through a records review and site investigation. We are looking for the proponent to describe the existing water quality and how it may be impacted by the project. For example, if there was discharge from your facility you would need to describe existing conditions, the environmental effect and mitigation.

2. For the water quantity component are we required to collect water velocity readings for any watercourse located within the 120 m buffer?

MOE does not require the proponent to collect water velocity reading. Again MOE is looking for background information that can be done through a records review and site investigation. Please make sure you have sufficient information to describe existing conditions, environmental effect and mitigation.

3. Who will review the aquatic field component (fish community, fish habitat), MOE, MNR or the local CA?

MOE reviews the water assessment and the waterbodies report. You may wish to contact both MNR and the local CA as they may have background information that you can use in your report/assessment.

4. Does MOE want to see a field plan prior to field investigations?

MOE does not have the staffing required to review any draft plans or documents. We do require a field plan prior to the investigation.

I hope this answers your questions. Should you have any additional questions or require clarifications please let me know.

Senior Project Evaluator
Renewable Energy Team
Environmental Assessment and Approvals Branch
Ministry of the Environment
2 St. Clair West, Floor 12A, Toronto, ON M4V 1L5
P: 416-326-6089 F: 416-314-8452

<http://www.ene.gov.on.ca/en/business/green-energy/>

From: Aitken, Sarah [<mailto:Sarah.Aitken@aecom.com>]
Sent: March 29, 2011 8:58 AM
To: McNeill, Shannon (ENE)
Subject: REA - Waterbodies component

Hi Shannon,

We spoke quickly yesterday and I was hoping to get your answers in writing so we have them on file.

These questions are regarding the waterbodies technical bulletin. If you could expand on what the MOE requires for each of these parameters that would be greatly appreciated.

1. For the water quality component are we required to collect in-situ or lab samples to satisfy MOE? Or are these just field observations of potential impacts?
2. For the water quantity component are we required to collect water velocity readings for any watercourse located within the 120 m buffer?
3. Who will review the aquatic field component (fish community, fish habitat), MOE, MNR or the local CA?
4. Does MOE want to see a field plan prior to field investigations?

Thanks for your help,

Sarah

Sarah Aitken, B.Sc.(Hons.)

Aquatic Ecologist

Environment

D 519.763.7783 ext 5146 M 519.820.0944

sarah.aitken@aecom.com

AECOM

512 Woolwich Street, Suite 2 Guelph, ON N1H 3X7

T: (519) 763-7783 F: (519) 763-1668

www.aecom.com

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Ministry of the Environment

Environmental Assessment and
Approvals Branch

2 St. Clair Avenue West
Floor 12A
Toronto ON M4V 1L5
Tel.: 416 314-8001
Fax: 416 314-8452

Ministère de l'Environnement

Direction des évaluations et des
autorisations environnementales

2, avenue St. Clair Ouest
Étage 12A
Toronto ON M4V 1L5
Tél. : 416 314-8001
Télééc. : 416 314-8452



April 8, 2011

MOE File #: SW-10-WF-0102

Mr. Tom Bird
Environmental Services Project Manager
NextEra Energy Canada, ULC
5500 North Service Road, Suite 205
Burlington, ON L7L 6W6

Dear Mr. Bird:

RE: Director's Aboriginal Communities List - Goshen Wind Energy Centre

The Ontario Ministry of the Environment (Ministry) has reviewed the information provided in the Draft of the Project Description Report (PDR) received for the *Goshen Wind Energy Centre*. The Ministry has reviewed the anticipated environmental effects of the project (as described in the PDR) relative to its current understanding of the interests of aboriginal communities in the area.

In accordance with section 14 of Ontario Regulation 359/09 "Renewable Energy Approvals under Part V.0.1 of the Act" (O. Reg. 359/09) made under the *Environmental Protection Act*, please find below the list of aboriginal communities who, in the opinion of the Director:

i) have or may have constitutionally protected aboriginal or treaty rights that may be adversely impacted by the project (s.14(b)(i)):

Aboriginal Community
Common Name:
Reserve Name:
Contact Information:
Chippewas of Kettle and Stony Point Kettle Point 44 RR 2 Forest ON N0N 1J0 Phone (519) 786-2125 Fax (519) 786-2108
Chippewas of the Thames First Nation Chippewas of the Thames 42 RR 1 Muncey ON N0L 1Y0 Phone (519) 289-5555 Fax (519) 289-2230

Aamjiwnaang First Nation Sarnia 45 978 Tashmoo Avenue Sarnia ON N7T 7H5 Phone (519) 336-8410 Fax (519) 336-0382
Bkejwanong Territory Walpole Island First Nation Walpole Island 46 RR 3 Wallaceburg ON N8A 4K9 Phone (519) 627-1481 Fax (519) 627-0440
Oneida Nation of the Thames Oneida 41 RR 2 Southwold ON N0L 2G0 Phone (519) 652-3244 Fax (519) 652-9287
Historic Saugeen Métis 204 High Street, Box 1492 Southampton ON N0H 2L0 Phone (519) 483-4000

OR

ii) otherwise may be interested in any negative environmental effects of the project (s.14(b)(ii)):

Munsee-Delaware First Nation Munsee-Delaware Nation 1 RR 1 Muncey ON N0L 1Y0 Phone (519) 289-5396 Fax (519) 289-5156
Delaware Nation Moravian of the Thames Moravian 47 RR 3 Thamesville ON N0P 2K0 Phone (519) 692-3936 Fax (519) 692-5522

NOTE: None of the foregoing should be taken to imply approval of this project or the contents of the PDR. This letter only addresses the requirement of the Director to provide a list of aboriginal communities to you as required pursuant to section 14 of O. Reg. 359/09.

You should also be aware that information upon which the above list of aboriginal communities is based is subject to change. Aboriginal communities can make assertions at any time, and other developments, for example the discovery of Aboriginal archaeological resources, can occur that may require additional aboriginal communities to be notified. Should this happen, the Ministry will contact you. Similarly, if you receive any feedback from any aboriginal communities not included in this list, as part of your consultation, the Ministry would appreciate being notified.

Please contact Narren Santos at (416) 314-8442 should you have any questions or require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Doris Dumais', with a long horizontal flourish extending to the right.

Doris Dumais
Director – Approvals Program
Environmental Assessment and Approvals Branch

cc: Mansoor Mahmood, Renewable Energy Team, Ministry of the Environment
Joe de Laronde, Aboriginal Affairs Branch, Ministry of the Environment

Owen, Jennifer

From: Santos, Narren (ENE) [Narren.Santos@ontario.ca]
Sent: Wednesday, April 18, 2012 9:31 AM
To: Owen, Jennifer
Cc: Guido, Sandra (ENE)
Subject: RE: Wind Projects in Huron County

Hi Jennifer:

This is a follow up to your emails earlier this month regarding the information about wind turbine projects in Huron County near the proposed Goshen Wind Energy Centre.

As you may be aware, the crystallization of wind turbine layouts would allow proponents to consider in their noise assessment, only the noise receptors (as defined in O.Reg. 359/09) that existed prior to the day the wind turbine layout was made publicly available.

For the purposes of conducting the wind turbine noise assessment for, the ministry does not expect proponents to consider other proposed wind turbines that were not publicly available after the crystallization date and we expect other proponents that have not made their wind turbine layouts publicly available to consider your wind turbine layout when they are planning their projects and conducting their noise assessments.

That being said, the wind turbine noise assessment for the Goshen Wind Energy Centre should address the combined impact of any existing or approved wind facilities and those proposed wind facilities for which the wind turbine layouts are publicly available. If your wind facility is to be located in an area where more than one wind facility is under development, you are encouraged to consult with neighbouring proponents to ensure projects will meet the requirements for cumulative noise effects from multiple wind turbines.

Please note the following wind farms for your consideration:

- Powertree's wind turbine project is within 3.6 km (CofA: 5488-6UMQPX)
- Next Era's Bluewater Wind Energy is within 6 km (Crystallized in December 2011).

Should you have any questions regarding this matter, please contact me.

Regards,
Narren Santos

Narren Santos | Senior Program Support Coordinator | Ministry of the Environment | Environmental Approvals Access and Service Integration Branch | 2 St. Clair Avenue West, 12a Floor Toronto, ON M4V 1L5 | Phone: 416.314.8442 | Fax: 416.314.8452 | Email: narren.santos@ontario.ca



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From: Owen, Jennifer [mailto:Jennifer.Owen@aecom.com]
Sent: April 17, 2012 9:43 AM
To: Guido, Sandra (ENE)
Cc: Cushing, Julia
Subject: RE: Wind Projects in Huron County
Importance: High

Hi Sandra,

I'm just following up again on the crystallization form I sent you on April 5th. When would you be able to let us know if there are any wind turbine projects or received approval from the MOR in Huron County?

Thanks again,

Jennifer

Jennifer Owen
Social Scientist
Environment
905.477.8400 x 312
jennifer.owen@aecom.com

AECOM
300 Town Center Blvd., Suite 300, Markham, ON L3R 5Z6
T 905.477.8400 F 905.477.1456
www.aecom.com

From: Owen, Jennifer
Sent: Tuesday, April 10, 2012 12:04 PM
To: 'Guido, Sandra (ENE)'
Cc: Cushing, Julia
Subject: RE: Wind Projects in Huron County

Hi Sandra,

I'm just following up on the crystallization form I sent last week. Do you know when it would be possible to know if any wind turbine projects that have released their site plan or received approval from the MOE in Huron County?

Thanks for your help,

Jennifer

Jennifer Owen
Social Scientist
Environment
905.477.8400 x 312
jennifer.owen@aecom.com

AECOM
300 Town Center Blvd., Suite 300, Markham, ON L3R 5Z6
T 905.477.8400 F 905.477.1456
www.aecom.com

From: Owen, Jennifer
Sent: Thursday, April 05, 2012 1:54 PM
To: 'Guido, Sandra (ENE)'
Cc: Cushing, Julia
Subject: RE: Wind Projects in Huron County

Sorry Sandra, I forgot to attach the form.

Thanks!

Jennifer

Jennifer Owen
Social Scientist

Environment
905.477.8400 x 312
jennifer.owen@aecom.com

AECOM
300 Town Center Blvd., Suite 300, Markham, ON L3R 5Z6
T 905.477.8400 F 905.477.1456
www.aecom.com

From: Owen, Jennifer
Sent: Thursday, April 05, 2012 1:50 PM
To: 'Guido, Sandra (ENE)'
Cc: Cushing, Julia
Subject: RE: Wind Projects in Huron County

Hi Sandra,
I have attached the crystallization sheet to this email. Again, we are just looking for any wind turbine projects that have released their site plan or received approval from the MOE in Huron County.
Please let me know if there is any more information you require.
Thank you for your help.
Jennifer

Jennifer Owen
Social Scientist
Environment
905.477.8400 x 312
jennifer.owen@aecom.com

AECOM
300 Town Center Blvd., Suite 300, Markham, ON L3R 5Z6
T 905.477.8400 F 905.477.1456
www.aecom.com

From: Guido, Sandra (ENE) [<mailto:Sandra.Guido@ontario.ca>]
Sent: Tuesday, April 03, 2012 4:13 PM
To: Owen, Jennifer
Subject: Wind Projects in Huron County

Hi Jennifer,

I received your voice mail regarding wind turbines with site plans in the Huron County area.

In order for us to provide you with the wind projects in that area that have released their draft site plan or received MOE approval, I would need to know the UTM coordinate of the farthest turbine for each project you are inquiring about. Please use the attached spreadsheet to provide this information and submit back to me.

Thank you,
Sandra

Sandra Guido
Senior Program Support Coordinator
Service Integration Unit
Environmental Approvals Access and Service Integration Branch
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A Toronto ON M4V 1L5
Tel: 416.327.4692 Fax: 416.314.8452
sandra.guido@ontario.ca

Ministry of Natural Resources

Memorandum

To	April Nix (MNR Guelph)	Page 1
CC	Heather Riddell (MNR Aylmer), Tara Lessard (MNR Clinton)	
Subject	NextEra Bluewater, Goshen and Jericho Wind Energy Centres, Natural Heritage and Water Assessments – Work Plan	
From	Vince Deschamps	
Date	June 8, 2010	Project Number 60155032

As discussed at our June 3rd meeting, our work plan for conducting natural heritage and water assessments of the NextEra Bluewater, Goshen and Jericho Wind Energy Centres is as follows:

1. Undertake Records Reviews

The purpose of the Records Review is to identify preliminary constraints and opportunities that will inform NextEra with regards to selecting preliminary turbine locations. It will also confirm the site investigations that will be required. Specific activities that will be undertaken during the records review include:

- **Natural Heritage:** Under the REA and Ontario Regulation 359/09, Natural Heritage refers primarily to terrestrial features including wetlands, but excluding aquatic habitat and water bodies. AECOM will conduct a Records Review to identify, delineate and categorize the significance of terrestrial habitats in the study areas in accordance with Section 25 of Ontario Regulation 359/09. The analysis will consist of a desktop review of available literature, online databases and remotely-sensed data, which will be verified and confirmed through consultation with the MNR.
- **Water and Water Bodies:** As part of the REA, Ontario Regulation 359/09 criteria have been included in Section 30 with respect to water and water bodies, which include lakes, permanent streams, intermittent streams, and seepage areas. To ensure that each project does not impact surface water features, an investigation of the 120 metre radius of the proposed project is required to determine if any water bodies are present (it is not anticipated that there are any lake trout lakes in the project areas). To meet these objectives, AECOM will search and analyze records that relate to water bodies within 120 metres of the project sites by contacting and obtaining mapping and other information from the MNR, the Ausable-Bayfield and St. Clair Conservation Authorities, municipalities and other agencies as required.

In addition, as part of the REA process, AECOM will undertake records review to identify groundwater resources, cultural heritage resources (i.e., Stage 1 Archaeological and built heritage assessments) and sensitive receptors (for noise and shadow flicker analysis) in the three project areas.

2. Prepare Constraints Mapping

Constraints mapping will be prepared in GIS for each project area, based on information collected as part of the records review. Specifically, the mapping will include the following features:

- Wetlands (Provincially Significant and Non-provincially significant), habitats of endangered and threatened species, Life Science Areas of Natural and Scientific Interest (ANSIs) and areas previously identified as significant wildlife habitat, significant woodlands or significant valleylands within 120 metres of the project sites;
- Protected areas (i.e., Pinery Provincial Park, Conservation Reserve, Environmentally Sensitive Areas, Important Bird Areas, etc.) within 120 metres of the project sites;
- Watercourses and water bodies within 120 metres of the project sites;
- Earth Science ANSIs within 50 metres of the project sites;
- Surficial geology;
- Private water wells;
- Known archaeological sites and areas of archaeological potential;
- Designated built heritage features;
- Infrastructure and linear facilities (e.g., roads, utility lines, pipelines, railways, etc.);
- Man-Made Structures (e.g., airports, buildings, towers, etc.);
- Communities and municipal boundaries; and,
- Sensitive noise receptors.

AECOM is utilizing data from Land Information Ontario (LIO), Ministry and Natural Resources (MNR), Natural Heritage Information Center (NHIC), and Natural Resources and Values Information System (NRVIS), and will incorporate additional data provided by MNR and other agencies as appropriate. In addition, AECOM will identify adjacent lands considerations and recommend buffers from ecological features, built features and property lines. These will be mapped in compliance with Ontario Regulation 359/09.

3. Site Investigations

Once NextEra has developed a site layout for each wind energy centre, based on the constraints mapping, AECOM will undertake detailed site investigations to gather additional information about the conditions at and around the turbines and all ancillary facilities, including access roads, underground electrical collection systems, and transformer stations. This information will be used to conduct the assessment of effects associated with each project, and the cumulative effect of all three projects. Specific information regarding site investigations is as follows:

- Natural Heritage: Natural Heritage Site Investigations will satisfy Section 26 of Ontario Regulation 359/09. Site investigations will be undertaken where the project is within 120 metres of any natural feature identified in the records review. The need for, and extent of, field surveys will be largely dependent upon the proximity of the individual turbines and other constructed facilities relative to natural vegetation communities and wildlife habitats. One or more of the following types of field investigations may be required at individual sites:
 - Avian surveys: spring and fall bird migration, breeding birds and winter birds;
 - Bat monitoring, in accordance with MNR's *Draft Bats and Bat Habitats – Guidelines for Wind Power Projects* (March 2010);

- Ecological Land Classification and mapping, to the Vegetation Type level (e.g., FOD5-1 for Dry-Fresh Sugar Maple Deciduous Forest Type);
 - One to three-season vegetation inventories;
 - Wetland, ANSI boundary delineation and confirmations;
 - Breeding amphibian surveys; and,
 - Species-specific investigations for Species at Risk.
- Water and Water Bodies: Water Site Investigations will satisfy Section 31 of Ontario Regulation 359/09. Additional site investigations will be conducted to ground truth the locations of surface water features identified during the desktop study, and to determine if any additional water bodies are present. The investigations will identify the boundaries of the water bodies, and the distance of the boundaries to the project.

Site investigations will also determine if there are any corrections needed to features identified during the Records Review stage. Site investigation reporting will include: mapping, weather, dates of surveys, summary of methods, qualifications of investigator etc. as required in the REA.

In addition, as part of the REA process, AECOM will also conduct site visits to ground truth geological mapping and determine the presence of any potential surface water - groundwater interaction areas, as well as to determine the need for confirmatory testing pitting and / or drilling. AECOM will also undertake Stage 2 Archaeological Assessments and detailed reviews of cultural heritage resources identified during the Records Review.

4. Undertake an Effects Assessment

Based on the information collected during the Records Review and subsequent site investigations, an effects assessment will be conducted to identify the effects of constructing and operating the project on the various components of the environment. The evaluation of significance will satisfy Section 27 of Ontario Regulation 359/09. As mentioned previously, our effects assessment will consider the effects of each project on its own and the cumulative effects of all three projects being constructed and operated simultaneously. It will involve the following steps:

- Determine Likely Effects – describe the potential and/or likely effects, both positive and negative, on the existing environment that may occur as a result of the project;
- Identify Mitigation Measures – identify specific mitigation, compensation, or enhancement measures that will need to be implemented to avoid, minimize, or other reduce the severity of any likely adverse effects of the project on the environment and/or the effects of the environment on the project
- Determine Residual (Net) Effects – describe the residual or net effects after the identified mitigation measures have been applied.

During the effects assessment, we will also identify elements of an environmental effects monitoring plan in respect to any negative environmental effects that may result from the installation of the turbines. The assessment of project-related effects will focus on interactions between the project components and natural heritage features and water bodies identified during the records review and site investigations (i.e., features within 120 metres of the project, as per Sections 37-40 of Ontario Regulation 359/09). The need for any additional field surveys will dependent upon the final locations

of the individual turbines and other structures relative to these natural features identified in earlier work, and the type of mitigation required.

In addition, as part of the REA process, AECOM will conduct additional analyses not associated with natural heritage or water bodies, but required under the REA process. These include a Cultural Heritage Analysis, Wind Turbine and Substation Noise Analysis, Shadow Flicker Analysis and Visual Impact Assessment.

5. Confirmation from Ministry of Natural Resources

AECOM intends to consult with the MNR throughout the course of the project. As per Section 28 of Ontario Regulation 359/09, AECOM will also seek written confirmation from the MNR that the Records Review, Site Investigations and Evaluation of Significance have been made using applicable evaluation criteria or procedures established or accepted by the Ministry, as amended from time to time.

**Ministry of
Natural Resources**
615 John Street North
Aylmer ON N5H 2S8
Tel: 519-773-9241
Fax: 519-773-9014

**Ministère des
Richesses naturelles**
615, rue John Nord
Aylmer ON N5H 2S8
Tél: 519-773-9241
Télé: 519-773-9014



August 31, 2010

Vince Deschamps
Senior Environmental Planner
AECOM
512 Woolwich St,
Suite 2 Guelph, ON N1H 3X7

Dear Mr. Deschamps

**RE: Background Information Request – Records Review and Work Plan
Bluewater & Goshen Wind Farms, Municipality Bluewater & Huron East Huron County
Jericho Wind Farm, Municipality of Lambton Shores, Township of Warwick**

Further to our meeting on June 3 2010, the MNR provides the following additional information and comments for consideration based on the submitted work plan and associated information. It is understood that the area of interest is for NextEra Energy's proposed Bluewater, Goshen and Jericho Wind Farms, which are moving through the renewable energy approvals (REA) process.

About the Renewable Energy Approvals Process

Under the Ministry of the Environment's Regulation for Renewable Energy Approvals (359/09) under the Environmental Protection Act, there are several requirements for Renewable Energy projects that must be met/addressed pertaining to the protection of natural heritage features. You can find the Regulation online at: http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_090359_e.htm

More specifically Sections 24-28 of the Regulation outline natural heritage assessment requirements for renewable energy projects. Section 38 also outlines natural heritage prohibitions and Environment Impact Study requirements.

As per Section 28 of the Regulation, the MNR is required to confirm the following with respect to a natural heritage assessment:

- That the determination of the existence of natural features and the boundaries of natural features was made using applicable evaluation criteria or procedures established by the MNR.
- That the site investigation and records review were conducted using applicable evaluation criteria or procedures established or accepted by the MNR, if no natural features are identified.
- That the evaluation of significance or provincial significance of natural features was conducted using applicable evaluation criteria or procedures established or accepted by the MNR.
- That the project location is not in a provincial park or conservation reserve.
- That the environmental impact assessment report(s) has/have been prepared in accordance with the procedures established or accepted by the MNR.

In addition to the Regulation requirements, proponents are also required to provide additional information as outlined in the MNR's Approvals and Permitting Requirements Document for Renewable Energy Projects

(APRD). The APRD contains direction on items outside of the Regulation that must be addressed for the purpose of the MNR's permits and approvals, including but not limited to petroleum resources and species protected under the *Endangered Species Act, 2007*. This document can be found online at <http://www.mnr.gov.on.ca/277097.pdf>.

The Natural Heritage Information Centre (NHIC) database may also provide additional natural heritage information. You can submit a request to obtain this information through their website at <http://nhic.mnr.gov.on.ca/>. To obtain digital mapping that the Ministry has available for the natural features mentioned below; please contact Land Information Ontario (LIO), or visit their website at <http://www.mnr.gov.on.ca/en/Business/LIO/index.html>.

To obtain more general information about developing renewable energy projects in Ontario, you can also contact the Renewable Energy Facilitation Office (REFO). They can be reached at REFO@ontario.ca or 1-877-440-REFO (7336). You can also visit their website at http://www.mei.gov.on.ca/en/energy/renewable/index.php?page=refo_office.

Natural Heritage Information

Wetlands

With respect to wetlands, parts of the provincially significant Hay Swamp wetland complex are located within the general study area for Goshen and Bluewater. In addition, there are several other wetlands that have been evaluated and identified as not provincially significant within the general study area.

Wetlands located within the study area for the Jericho project include:

- Ausable River Wetland (PSW)
- Bear Creek Source Woodlot (LSW)
- Spicebush Swamp (LSW)
- Thedford Swamp (PSW)
- Warwick Conservation Area (PSW)

Mapping for these features is available through LIO. If you are interested in accessing and reviewing hard copy wetland reports/information for the Bluewater and Goshen study areas, please contact Tara Lessard out of the Clinton Area Office at tara.lessard@ontario.ca or 519-482-3601 to make arrangements. For the Jericho study area, please contact Erin Sanders at the Aylmer District Office at erin.sanders@ontario.ca or 519-773-4715.

Fisheries

There is also hardy copy fisheries information available for a number of the water courses within the Bluewater and Goshen study areas. Please contact Tara Lessard to make arrangements to access this information.

As for the Jericho study area, please see the attached list of fish species survey data for watercourses within the study area.

Areas of Natural and Scientific Interest

The following regionally significant Areas of Natural and Scientific Interest (ANSI) are located within the Goshen and/or Bluewater study areas:

- Bayfield South Life Science ANSI,
- Dashwood Area Earth Science ANSI,
- Khiva Conservation Forest Life Science ANSI, and
- Hay Swamp Life Science ANSI.

The following ANSIs are located within the Jericho study area:

- Ausable River Valley Life ANSI
- Thedford Brickyard Earth ANSI

Mapping of ANSI features is available through LIO.

Woodlands

There are several old “agreement forests” parcels scattered throughout the Bluewater and Goshen study areas, including:

- Hay Swamp Tract,
- Carroll Tract, and
- Coleman Tract.

The following are within the Jericho study area:

- | | |
|-------------------|-----------------------|
| • Carroll Tract | • Saddler |
| • Harpley Tract | • Sharrow Tract |
| • Hay Swamp Tract | • Sweltzer Tract |
| • Mahon Tract | • Turnbull Tract |
| • Ratz Tract | • Webb and Wein Tract |
| • Roy Ratz Tract | |

Some of these lands are currently owned/ managed by the Ausable-Bayfield Conservation Authority, the County of Huron or local municipality; as such these agencies may be able to provide additional information pertaining to these sites. The old agreement forest layer is also available through LIO

There are a number of wooded areas within the general study areas, which appear to range from small hedgerow features to larger woodland communities up to over 100 hectares in size. Several of the woodland communities have also been identified as deer wintering areas, which should also be captured as part of the overall NHA in relation to significant wildlife habitat. Mapping is also available for identified deer wintering areas and wooded areas through LIO.

Evaluation of Significance

An evaluation of significance is required for all natural features within 120 m of the project location. If a natural feature, such as woodland or valleyland is not already evaluated/identified as significant, the MNR recommends applying the criteria outlined in the recently updated Natural Heritage Reference Manual – second edition, which can be found online at: <http://www.mnr.gov.on.ca/289522.pdf>. If a feature is already evaluated for significance, please provide the list of criteria that were used to determine significance.

Post-Construction Monitoring

As part of the Environmental Effects Monitoring Plan, proponents of wind power projects are encouraged to submit detailed bird and bat post-construction monitoring work plans to the MNR for review, along with the NHA reports. The MNR encourages this to ensure that the post-construction monitoring plan meets the guidelines and to ensure that all wind power proponents are conducting post-construction monitoring in a consistent manner across the province.

The Ministry has guidelines to assist proponents in developing appropriate bird and bat monitoring protocols, including the ‘Guideline to Assist in the Review of Wind Power Proposals: Potential Impacts to Birds and Bird Habitats’ and the recently updated draft ‘Bats and Bat Habitats: Guideline for Wind Power Projects’. These documents are available on the Ministry’s website at www.mnr.gov.on.ca under the Energy–Windpower – Policies, Procedures and Guidelines section. Please note that the MNR is currently in the process of updating the bird guidelines to reflect the recent changes to the renewable energy approvals process.

Potential Bat Habitat

Further, there are areas of karst that may support potential bat habitat within Huron County. Karst mapping is provided through the Ministry of Northern Development, Mines and Forestry (MNDMF). You will need to contact them directly to obtain available karst data and information.

Information Relating to APRD Requirements

Ministry staff are aware of occurrence records of Species at Risk (SAR) within the study areas. More specifically the Ministry is aware of the following occurrences on and/or immediately adjacent to the following study areas:

Bluewater Wind Farm Study Area:

- Northern Brook Lamprey (Special Concern) in the Bayfield and Bannockburn Rivers
- Milksnake (Special Concern), and
- Goldenseal (Threatened).

Goshen Study Wind Farm Study Area:

- Goldenseal (Threatened),
- Green Dragon (Special Concern),
- Blanding's Turtle (Threatened),
- Eastern Hog-nosed Snake (Threatened), and
- historical record for American Badger (Endangered).

Jericho Wind Farm Study Area:

- Round Pigtoe (Endangered),
- Mudpuppy Mussel (Endangered),
- Northern Riffleshell (Endangered),
- Snuffbox (Endangered),
- Eastern Hog-nosed Snake (Threatened),
- Queensnake (Threatened),
- Spiny Softshell (Threatened),
- Spotted Turtle (Endangered),
- Blanding's Turtle (Threatened),
- Butternut (Endangered),
- Dwarf Hackberry (Threatened),
- Dense Blazing Star (Threatened),
- Eastern Flowering Dogwood (Endangered),
- Heart-leaved Plantain (Endangered),
- Goldenseal (Threatened),
- Prothonotary Warbler (Endangered),
- Loggerhead Shrike (Endangered),
- Hooded Warbler (Special Concern), and
- Acadian Flycatcher (Endangered).

Within these areas of Huron County:

- Butternut (Endangered),
- American Ginseng (Endangered),
- Gray Fox (Endangered),
- Barn Owl (Endangered),
- Wavy-rayed Lamp-mussel (Endangered),
- Queen Snake (Threatened),
- Least Bittern (Threatened),
- Black Redhorse (Threatened),
- Redside Dace (Threatened),
- Eastern Fringed Prairie Orchid (Historical - Threatened),
- Whip-Poor-Will (Threatened),
- Monarch Butterfly (Special Concern),
- Common Nighthawk (Special Concern),
- Short-eared Owl (Special Concern),
- Tuberos Indian Plantain (Special Concern),
- Black Tern (Special Concern),
- Louisiana Water-thrush (Special Concern),
- Eastern Ribbonsnake (Special Concern), and
- Snapping Turtle (Special Concern).

It should also be noted that because the province has not been surveyed comprehensively for the presence of SAR, the absence of an element occurrence does not indicate the absence of the species. Consequently, the presence of element occurrences is useful to flag the presence of a SAR in an area, but is not an appropriate tool to determine whether a species is present at the local (property-scale) level.

Based on the study areas for the Bluewater, Goshen and Jericho projects and given the potential for SAR to occur within this area, natural heritage surveys should include SAR investigations where there is species-appropriate habitat. Ministry staff recommend undertaking a comprehensive botanical inventory of the natural heritage features within the study area for terrestrial systems and include aquatic habitat investigations where appropriate, to inform the development of a map of all vegetation communities and aquatic habitats within the study areas. The vegetation communities should be classified as per the “Ecological Land Classification for Southern Ontario” system, to either the “Ecosite” or “Vegetation Type” level, depending on the habitat specificity of potential SAR within the study area.

This information can then be used to identify potential habitats associated with the list of SAR species provided above. Where potential habitats are identified a more detailed investigation should occur to confirm the presence of SAR species. The survey report for SAR should also describe how each SAR was surveyed for, and provide a rationale for why certain species, if any, appearing on the list provided were not the subject of the survey.

Petroleum Resources

With respect to Petroleum Resources, due to possible safety concerns when selecting turbine locations, it is also recommended that you review the Ontario Oil, Gas and Salt Resources Library for information about known well and pool locations (<http://www.ogsrlibrary.com/>) of petroleum in the study area. The Ontario Oil, Gas and Salt Resources Library is the most accurate source of petroleum resource information available. Some additional information pertaining to set back requirements from petroleum resource operations is included within the MNR’s APRD document.

Fisheries

With respect to fisheries information, this information may be used as part of the water report where applicable, or in the identification of SAR and associated habitat. Other fisheries information should be collected in order to address any possible requirements or approvals such as from the Conservation Authority or Department of Fisheries and Oceans.

General Comments on the Work Plan

Project Location

With respect to the work plan in general it should be noted that references to “project sites” should reflect the definition of project location as defined in the Regulation. While the current work plan identifies the general study area this will also need to be refined to reflect the project location as this information becomes available.

Significant Wildlife Habitat (SWH)

The first bullet in Section 2 identifies that significant wildlife habitat (SWH) will be identified and mapped through the records review and site investigation processes. It is unclear to Ministry staff as to why important bird areas have been identified separately within the second bullet as these features would appear to be significant wildlife habitat. If these areas are being identified separately in relation to federal requirements, please note that permits/ approvals associated with these requirements are separate from the REA process and not part of the NHA submission.

With respect to Section 3 Ministry staff note that while certain field investigations, that may be used as part of the process for identifying SWH and SAR, have been generally identified. However, other types of investigations for taxonomic groups such as reptiles and mammals should also be included.

When reporting on SWH, please ensure that the records review and site investigation discusses 'candidate' SWH within 120 m of the project location and that the evaluation of significance confirms the presence/absence of SWH based on criteria in the Significant Wildlife Habitat Technical Guide where you will see that wildlife habitat is divided into four broad categories:

- 1) Seasonal concentration areas
- 2) Rare vegetation communities or specialised habitats for wildlife
- 3) Habitats of species of conservation concern, excluding the habitats of endangered and threatened species
- 4) Animal movement corridors.

Wetlands and ANSI Boundaries

Bullet 5 refers to wetland delineation and ANSI boundary delineation and confirmation. It should be understood that while the identification of wetland features occurs as part of the site investigation process, the evaluation of wetland features identified through the site investigation process and located within 120m of the project location form part of the evaluation of significance within the NHA.

It should also be understood that the delineation and confirmation of ANSI features is not part of the NHA process. Where the project location falls within 120m of a provincially significant life science ANSI or 50m of a provincially significant earth science ANSI, the EIS requirements within Section 38 apply. Information relating to regional ANSIs may support the identification of other natural heritage features such as significant wildlife habitat and potential habitat for SAR.

Mapping

In addition to the requirements for reporting of site investigations as per Section 26, mapping of the project location in relation to identified natural features is also required as part of the site investigation. Please refer to Section 26 (3)3 of the Regulation for the mapping requirements. Please ensure that this mapping includes mapping of wildlife habitat and/or 'candidate' SWH identified during site investigation.

Environmental Effects

With respect to Section 4 – Undertake an Effects Assessment, it appears that this section incorporates requirements pertaining to the evaluation of significance and environment impact study report requirements as part of the NHA, and the preparation of the Environmental Effects Monitoring Plan (EEMP). Ministry staff would generally recommend that this section be clarified to separately identify work that will address each of these components. Further, only the evaluation of significance and environment impact study report (where applicable) comprise parts of the NHA submission. The EEMP is a separate report required within the REA process and not a part of the NHA. However, where elements of the NHA are also incorporated into the EEMP, such as with post-construction bird and bat monitoring, Ministry staff may also be able to provide input into the development of these elements.

While the Ministry supports the consideration of cumulative effects of all three projects being constructed and operated simultaneously given the close proximity of the three study areas, it should be understood that for the purposes of the NHA submission to MNR for confirmation, three separate NHA studies will be submitted.

Finally, it is recommended that you also review any other information available from the Counties of Huron and Lambton, the Municipalities of Bluewater, South Huron, and Lambton Shores and the Ausable Bayfield Conservation Authority, if you have not already done so.

I trust this information will be of assistance in the development of the natural heritage assessment.

If you have any questions about the information provided for the Bluewater and Goshen projects please contact April Nix at april.nix@ontario.ca or (519)826-4939 and if you have the same about the information provided for the Jericho project, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "HRiddell".

Heather Riddell

A/Planning Ecologist, Aylmer District
(519) 773-4723
heather.riddell@ontario.ca

- c. April Nix (MNR)
- Julia Cushing (AECOM)
- Thomas Bird (Nextera)

Owen, Jennifer

From: Cushing, Julia
Sent: Monday, July 26, 2010 11:37 AM
To: 'daraleigh.irving@ontario.ca'; 'mike.stone@ontario.ca'
Cc: Rose, Marc; Williams, Melanie D.; 'thomas.bird@nexteraenergy.com'
Subject: NextEra Energy Canada's Bluewater, Goshen and Jericho Wind Energy Centre Proposals
Attachments: Jericho_Draft PDR_June 28.pdf; Bluewater_Draft PDR_June 28.pdf; Goshen_Draft PDR_June 28.pdf

Good Morning Ms. Irving and Mr. Stone,

NextEra Energy Canada, ULC, together with Canadian Green Power, is proposing to construct three wind energy projects in south-western Ontario. The first is proposed in Bluewater and Huron East Townships, Huron County; the second in Bluewater and South Huron Townships, Huron County; and lastly, the third in the Municipality of Lambton Shores, Warwick and Brooke-Alvinston Townships, Lambton County, Ontario. These projects are referred to as the Bluewater Wind Energy Centre, Goshen Wind Energy Centre, and Jericho Wind Energy Centre respectively. Although separate Renewable Energy Approval (REA) applications will be submitted for all three projects, the effects assessment will take into consideration the cumulative effects of these three wind energy centres.

In accordance with the recommendation outlined in the document titled *Guidance for Preparing the Project Description Report* (PDR) as part of an application under Ontario Regulation 359/09, we are contacting your agency for information and guidance on the requirements related to the preparation of the PDR and the overall process. Specifically, we are interested in receiving information regarding required permits and approvals, any potential constraints, as well as other comments you may have relating to your agency's mandate. We have included a copy of the draft PDR for each of the projects above to provide you with background information and context for our request.

We have addressed this request to both of you because the Projects fall within the Guelph and Aylmer District MNR jurisdictions. Please note that the draft PDRs are also available for public viewing at www.canadianwindproposals.com.

Regards,

Julia Cushing
Environmental Planner
Julia.Cushing@aecom.com

AECOM
300 Town Centre Boulevard, Suite 300
Markham, Ontario, Canada L3R 5Z6
T 905-477-8400 ext 448 F 905-477-1456
www.aecom.com

Owen, Jennifer

From: Aitken, Sarah
Sent: Wednesday, July 20, 2011 2:57 PM
To: Cushing, Julia
Subject: FW: Scientific Collectors Permits

Follow Up Flag: Follow up
Flag Status: Completed

Categories: Red Category

From: Lessard, Tara (MNR) [<mailto:Tara.Lessard@ontario.ca>]
Sent: Tuesday, September 07, 2010 2:05 PM
To: Aitken, Sarah
Cc: Nix, April (MNR)
Subject: Scientific Collectors Permits

Hi Sarah,

I wanted to follow-up with you via email regarding the phone conversation that we had last week regarding a blanketed Scientific Collector's Permit for the Bluewater/Goshen/Jericho windpower project. Apparently this question has come up around other windpower projects in the district, and the consensus was that the watercourse crossings themselves need to be narrowed down before a SCP can be issued. As I mentioned to you on the phone, a Scientific Collector's Permit can be issued rather quickly, if necessary. However, there may also be species at risk in some of the watercourses, so additional permits may be required for SAR, making it especially important for the specific locations to be narrowed down. SAR permits can take between 3 months and 1 year to be developed/approved, depending on the type of permit, so we would really need to be sure on the location before we went down that route.

Let me know if you have any additional questions.

Tara

Tara Lessard
A/ Area Biologist
Ontario Ministry of Natural Resources
Guelph District – Clinton Area Office
P.O. Box 819
100 Don Street
Clinton, ON
N0M 1L0

Phone: (519) 482-3601
Fax: (519) 482-5031
Email: tara.lessard@ontario.ca

Communication Record

Date	February 4, 2011	Time	11:40AM
Between	Julia Cushing	and	April Nix
	AECOM		MNR
Telephone #	519-826-4939	Project #	60155032
Project Name	Bluewater and Goshen Wind Energy Centres		
Subject	Setbacks to Petroleum Resources		

PLEASE NOTE: If this communication record does not agree with your records of the meeting, or if there are any omissions, please advise. Otherwise it will be assumed that the contents of this record are correct.

Comments

- Julia followed up with April regarding the email she sent to her earlier in the week seeking to confirm the completeness and accuracy of the Petroleum Resources in the Bluewater and Goshen Study Areas
- April confirmed that she did receive the email and will pass it on to the Petroleum Resource Centre
- She indicated that the priority projects right now are those with FIT contracts and the process of confirming Petroleum Resources may take between 4-6 weeks
- Julia inquired if the Petroleum Resource Centre will provide information on the boundary of the operation (as the 75 metre setback is to the boundary of the operation, not just the well itself) as well as information on whether the operation was decommissioned to today's standards.
- April indicated that often, the well itself is the operation, but that the PRC will provide all the information they have, including whether the operation was decommissioned to today's standards.
- If we were to site the project within 75 metres of the well, an Engineers Report is required.

Owen, Jennifer

From: Nix, April (MNR) [April.Nix@ontario.ca]
Sent: Monday, March 28, 2011 12:04 PM
To: Aitken, Sarah
Cc: Deschamps, Vince; Riddell, Heather (MNR); Harkins, Erin (MNR)
Subject: RE: NextEra Wind Energy
Attachments: Inland Ontario Lakes Designated for Lake Trout Management.pdf

Hi Sarah,

With respect to the Bluewater and Goshen sites,

For the water bodies report please note that the Great Lakes are not considered Lake Trout Lakes for the purpose of the Renewable Energy Approvals regulation. Only those lakes listed in the *Inland Ontario Lakes Designated for Lake Trout Management ,May 2006* (as amended and revised) are considered Lake Trout Lakes for the purpose of the regulation (see document attached).

You should be directing questions regarding Jericho to Heather Riddell in Alymer District.

Cheers,

April

April Nix
Renewable Energy Planning Ecologist
Ministry of Natural Resources, Guelph District
1 Stone Road West
Guelph ON, N1G 4Y2
(P) 519-826-4939
(F) 519-826-6849
email: april.nix@ontario.ca

From: Aitken, Sarah [<mailto:Sarah.Aitken@aecom.com>]
Sent: March 28, 2011 11:36 AM
To: Nix, April (MNR)
Cc: Deschamps, Vince
Subject: NextEra Wind Energy

Hi April,

We are in the process of completing our records review for the waterbodies requirements for MOE. It is not anticipated that there are any lake trout lakes in the project areas, however; can you please confirm if there are any within the Jericho, Bluewater or Goshen study areas.

Thankyou,
Sarah

Sarah Aitken, B.Sc.(Hons.)
Aquatic Ecologist
Environment
D 519.763.7783 ext 5146 M 519.820.0944
sarah.aitken@aecom.com

AECOM
512 Woolwich Street, Suite 2 Guelph, ON N1H 3X7

Owen, Jennifer

From: Nix, April (MNR) [April.Nix@ontario.ca]
Sent: Wednesday, May 04, 2011 11:19 AM
To: Cushing, Julia
Subject: RE: NextEra - Bluewater and Goshen Wind Energy Centres

Julia,

We've heard back from PRC and it would appear that the well locations provided when compared to the information in MNR's records don't appear to match. The MNR information does however match the records available on the Ontario Oil, Gas and Salt Resources Library (OGSRL), and as such it is recommended that you download the most up-to-date well location information. This information is updated monthly on the 15th of the month.

The requirements for setbacks from petroleum resource operations are outlined in Section 7.8 of the APRD. Once you know the project location for the Wind Farms you will need to determine if their project components fall within 75 metres of any petroleum wells or associated works. If so, further information regarding these wells may be obtained from the OGSRL. If you have specific technical questions regarding interpretation of the information please let me know.

Also please note that MNR can not guarantee the accuracy of the data in the Ministry's records as some of the information is historical and may be inaccurate or incomplete. Further the well data retrieved in the search of the MNR's database are only the wells of which we are currently aware. Other wells may exist in the project area for which we do not have any records.

If any wells in addition to the wells identified in the database search are encountered during project development, please contact MNR and let us know.

Cheers,

April

April Nix
Renewable Energy Planning Ecologist
Ministry of Natural Resources, Guelph District
1 Stone Road West
Guelph ON, N1G 4Y2
(P) 519-826-4939
(F) 519-826-6849
email: april.nix@ontario.ca

From: Cushing, Julia [<mailto:Julia.Cushing@aecom.com>]
Sent: April 8, 2011 12:42 PM
To: Nix, April (MNR)
Cc: Deschamps, Vince; Radue, Marianne; Rose, Marc
Subject: FW: NextEra - Bluewater and Goshen Wind Energy Centres

Hello April,

I wanted to follow up with you about the request we sent you in February regarding petroleum resources in the Bluewater and Goshen study areas.

Can you confirm when we will receive this information?

Thank you,

Julia

From: Cushing, Julia
Sent: Tuesday, February 01, 2011 2:30 PM
To: 'april.nix@ontario.ca'
Cc: Deschamps, Vince; Rose, Marc; Williams, Melanie D.
Subject: NextEra - Bluewater and Goshen Wind Energy Centres

Hello April,

I had a conversation today with Heather Riddell (MNR) regarding the setbacks to petroleum resource operations. Heather indicated to me that the procedure for verifying the existing resources and associated setbacks is to provide both of you with GIS shapefiles for the Study Area boundary and for the existing Petroleum Resources in the Study Area (the Jericho shapefiles for Heather, and the Bluewater and Goshen shapefiles for you) as well as a list which summarizes these resources.

It is my understanding that you will forward this information to the Petroleum Resource Centre and request that they confirm the accuracy and completeness of this information, and that they provide the boundaries of the operation, whether any decommissioned wells were done so by today's standards and any information on required setbacks. Heather indicated this process may take between 3 weeks to one month. As such, I have attached the required data, please contact me if you require any additional information.

Thank you for your assistance.

Regards,

Julia

Julia Cushing
Environmental Planner
Julia.Cushing@aecom.com

AECOM
300 Town Centre Boulevard, Suite 300
Markham, Ontario, Canada L3R 5Z6
T 905-477-8400 ext 448 F 905-477-1456
www.aecom.com

Owen, Jennifer

Subject: FW: Next Era ELC/Amphibian field survey protocols

From: Riddell, Heather (MNR) [mailto:Heather.Riddell@ontario.ca]

Sent: Monday, May 16, 2011 3:53 PM

To: Jolly, Dave

Cc: MacKay Ward, Jessica; Nix, April (MNR)

Subject: RE: Next Era ELC/Amphibian field survey protocols

Hi Dave,

The Aylmer and Guelph offices of the MNR reviewed the ELC and amphibian protocols provided for the Nextera projects (Jericho, Goshen and Bluewater) and provide the following recommendations in response.

Amphibian Studies and Candidate SWH

It should be understood that general feature-based criteria found in the Significant Wildlife Habitat Technical Guide (SWHTG) can be used to identify Candidate Significant Wildlife Habitat (SWH) using simple investigation methods such as visual scans. This information should be used to identify natural features, including Candidate SWH.

For the purposes of the site investigation, it is unclear what methods were used to identify the various Candidate SWH amphibian breeding habitats. When applying the SWHTG there are two types of amphibian breeding habitats to separately consider – wetland and woodlands habitats. Each feature (habitat) should be identified and discussed separately in the NHA site investigation and evaluation of significance reports.

Where Candidate SWH meets the habitat-based criteria from the SWHTG and proponents are proposing development in or within 120m of a Candidate SWH, an evaluation of significance is required.

Point Count, Transect, Floristic Studies, Egg mass/larval counts and Observational Studies are examples of methods for evaluating significance of natural features, and must be completed at the appropriate time of year. These methods are intended to document the significance of Candidate SWH, meaning the activity and behaviour, as well as abundance and diversity of specific species using these habitats. These types of studies including amphibian breeding call studies should be reported within the methods and results of the Evaluation of Significance Report.

With respect to the proposed amphibian call studies for the purposes of evaluating the significance of Candidate SWH amphibian breeding habitats, Ministry staff note the following:

1. The proposed method of only two surveys would not include data for the third timing window as per the marsh monitoring protocol, and may not accurately capture breeding activity from later breeding amphibian species. Further given the delayed season due to weather conditions so far this year for some species breeding-related activities, it is recommended that observations from all three of the survey windows should be represented.
2. Amphibian call locations should be within/adjacent to each Candidate SWH identified through the site investigation and provide information to support identifying the diversity and abundance of species using the habitat(s).
3. It is unclear how other amphibian species that cannot be monitored through vocalization studies (such as salamanders) are being considered within the evaluation of significance. Where amphibian woodland habitats are identified as Candidate SWH, evaluations of significance should also capture salamanders when determining the species diversity and abundance of amphibian habitats.
4. The proposed protocol states that surveys will end at 2 a.m., while the marsh monitoring protocol recommends ending surveys at 12 a.m. We recommend adhering to the marsh monitoring program and ending surveys at 12 a.m., as opposed to 2 a.m.

This same approach for identifying Candidate SWH should be applied to all other potential habitats and appropriate evaluations are required where Candidate SWH is in or within 120m of the project location.

Ecological Land Classification (ELC)

We noted that the ELC protocol is proposing that soil samples are only taken “at sites that appear transitional (i.e. where it is unclear whether unit is upland or wetland)...”. The criteria presented dictates “ii) the moisture regime should be >6 (i.e. wet) and iii) ground cover should reflect >50% wetland vegetation”. The most recent guidance available, which assists with determining when an ELC community meets the definition of a wetland in Ontario Wetland Evaluation System (OWES), states that when an ELC community has a moisture regime of 5 or more and contains 50% or more wetland plants it is considered a wetland by OWES. Therefore, we suggest that soils data is collected for each community and that the OWES 3rd edition southern manual is utilized to determine if any communities are wetlands. The boundaries of wetlands should also be delineated using OWES, not ELC, i.e. ELC and OWES protocol should not be combined, but used separately as they both serve separate purposes. Where MNR has previously identified/ evaluated wetland features, the boundaries were assigned using OWES; however, if additional information is collected and revisions to an OWES boundary proposed this needs to be communicated within the NHA.

ELC should be completed by individuals who have completed ELC training. Where ELC is being completed to the Ecosite level the field cards should be completed, and included as part of the field notes. This should include soils information.

If any Endangered and/or Threatened species at risk (SAR) species are encountered during ELC surveys, this information is not to be reported within the NHA, but should be provided to the Ministry in a separate report to meet the requirements of Approvals and Permitting Requirements Document (APRD).

It is our understanding that these projects do not currently have a Feed-in Tariff (FIT) contract, but are awaiting the results of Economic Connection Testing (ECT). Given the number of renewable energy applications we are receiving at this time, we are prioritizing our reviews of Natural Heritage Assessments and work plans for renewable energy projects. Those projects that currently have FIT contracts with OPA are being given first priority given the timelines they are required to meet. As such, we will be unable review any additional survey protocols for these projects at this time.

Should the status of these projects change and a FIT contract be awarded to any one of these projects, please let us know and Ministry staff would work to review and provide comments on the work plan at that time.

If you have any questions please let me know.

Regards,

Heather

Heather Riddell

A/ Planning Ecologist
MNR, Aylmer District
(519) 773-4723

From: Jolly, Dave [mailto:Dave.Jolly@aecom.com]
Sent: May 10, 2011 2:08 PM
To: Riddell, Heather (MNR)
Cc: MacKay Ward, Jessica
Subject: RE: Next Era ELC/Amphibian field survey protocols

Thx Heather; I appreciate your attention to this ASAP as it will make our field investigations more accurate and efficient.



From: Riddell, Heather (MNR) [mailto:Heather.Riddell@ontario.ca]
Sent: Tuesday, May 10, 2011 1:54 PM
To: Jolly, Dave
Cc: MacKay Ward, Jessica
Subject: RE: Next Era ELC/Amphibian field survey protocols

Hi Dave,

I'm glad you double-checked because for some reason that email when to my Junkmail filter. I am just seeing it now. I don't know that we will be able to provide a response by tomorrow. We commonly need a couple weeks to review workplans, etc. given our current workload, but I will circulate it with technical staff and try to get back to you soon.

Regards,
Heather

Heather Riddell
A/ Planning Ecologist
MNR, Aylmer District
(519) 773-4723

From: Jolly, Dave [mailto:Dave.Jolly@aecom.com]
Sent: May 10, 2011 1:46 PM
To: Riddell, Heather (MNR)
Cc: MacKay Ward, Jessica
Subject: RE: Next Era ELC/Amphibian field survey protocols

Thx Heather:

I'll take a look at documents to pull out info for our field investigations. Did you receive our ELC/vegetation + Amphibian survey protocols? Any word on when you can get back to me on them as ideally we would like to start field investigations as early as tomorrow?



From: Riddell, Heather (MNR) [mailto:Heather.Riddell@ontario.ca]
Sent: Tuesday, May 10, 2011 1:36 PM
To: Jolly, Dave
Cc: MacKay Ward, Jessica
Subject: RE: Next Era ELC/Amphibian field survey protocols

Hi Dave,

It's called the Wetland Characteristics and Ecological Functions Assessment tool and it's located in Appendix C (Page 80) of the Natural Heritage Assessment Guide (NHAG). Please note that the Significant Wildlife Habitat (SWH) Criteria Schedules are draft and the SWH Technical Guide should be the primary reference to use for criteria for identifying candidate SWH and evaluating Candidate SWH for significance.

Regards,
Heather

Heather Riddell

A/ Planning Ecologist
MNR, Aylmer District
(519) 773-4723

From: Jolly, Dave [mailto:Dave.Jolly@aecom.com]
Sent: May 10, 2011 11:25 AM
To: Riddell, Heather (MNR)
Cc: MacKay Ward, Jessica
Subject: Re: Next Era ELC/Amphibian field survey protocols

Hi Heather:

You mentioned an OWES tool that we might be able to use as a possible short cut to full OWES for Next Era sites. Did I hear that correctly? If so, please provide details or where you can find it in the Natural Heritage Assessment Guide or Significant Wildlife Habitat Ecoregion Criteria Schedules Addendum to Significant Wildlife Habitat Technical Guide.



From: Jolly, Dave
Sent: Monday, May 09, 2011 6:41 PM
To: 'heather.riddell@ontario.ca'
Cc: 'april.nix@ontario.ca'; MacKay Ward, Jessica; Deschamps, Vince; Radue, Marianne
Subject: Re: Next Era ELC/Amphibian field survey protocols

Hello Heather and April:

Please find attached the protocol procedures we are using to perform ELC/vegetation & amphibian surveys for Next Era sites. We have conducted 1 amphibian survey at all sites within the foot print of turbines and few, if any, met the criteria for significant wildlife habitat. Thusly, we feel that only a total of two amphibian surveys would suffice to capture a representative sampling of amphibians found. The timing of this second amphibian survey would be near the end of this month. With regards to following MNR guidelines to determine significant wildlife habitat, valleylands, etc. we would conduct the short version ELC (ie. assessing vegetation to classify polygons) and obtain a soil profile whenever there is some doubt as to whether a site is a wetland. If you could kindly provide your input on this ASAP, preferably by Wednesday so we can begin ELC/vegetation surveys that would be great.

Dave Jolly, B.Sc.

AECOM
Ecologist

(905) 477-8400 ext. 403 Work
Dave.Jolly@aecom.com

Owen, Jennifer

From: MacKay Ward, Jessica
Sent: Thursday, August 25, 2011 4:52 PM
To: Cushing, Julia
Subject: FW: NextEra - Goshen Records Review Request
Attachments: MNRRecordsReviewRequest_Aug232011_Goshen.docx; 60155032_Goshen_NaturalFeatureRecReview.pdf; GoshenStudyArea.zip

From: MacKay Ward, Jessica
Sent: Thursday, August 25, 2011 4:37 PM
To: 'Cameron, Amy (MNR)'
Cc: Deschamps, Vince
Subject: NextEra - Goshen Records Review Request

Hello Amy,

Please find attached our records review request form and shapefiles for the Goshen Wind Energy Centre. Please note that the project layout has not been finalized, however preliminary layouts for turbines, access roads and collection lines are represented on the attached map. As these layouts are still subject to change, we are presently conducting the records review for the entire Goshen Wind Energy Centre study area. There is no Transmission Line Study Area for Goshen because the point of interconnect will be located within the Goshen Wind Energy Centre Study Area.

Please do not hesitate to contact me should you have any questions or require additional information.

Regards,

Jessica

Jessica MacKay Ward, Ph.D.
Ecologist
AECOM
300 Town Centre Blvd, Suite 300, Markham, ON, L3R 5Z6
Tel: 905-477-8400 ext. 225
Fax: 905-477-1456
Jessica.MacKayWard@aecom.com

Owen, Jennifer

From: Cushing, Julia
Sent: Monday, January 02, 2012 12:04 PM
To: Owen, Jennifer
Subject: FW: NextEra - Timing of site investigations for NHA reports

Categories: Red Category

For the consultation record.

From: Boos, John (MNR) [<mailto:john.boos@ontario.ca>]
Sent: Wednesday, September 28, 2011 11:59 AM
To: MacKay Ward, Jessica
Cc: Rose, Marc; Cushing, Julia; Bird, Thomas; Kamstra, James
Subject: RE: NextEra - Timing of site investigations for NHA reports

Jessica,

What you outline below is what we discussed and is accurate.

Soil Data for ELC; although soils are recommended for proper ELC methods, just doing vegetation descriptions to Ecosite is suitable for this process except where there are questions for wetland e.g. wet meadows or lowland woodland/swamp areas. Also utilize soil probes to build the soil profiles, not soil pits.

Prism Sweeps are required when determining if you have >10 large diameter trees within a woodlot or ELC polygon within a larger woodlot that would qualify as a Bat Maternity Roost (Not Hibernacula or winter roosts, these are in caves or mines). This is the only SWH that would require this and only within mature to overmature forest stands.

Some site investigation work can be done during the fall and winter. However there are certain features that may require a seasonal visit to re-confirm or determine if a feature should be considered or is significant. An example is for rare or special concern plant species, some of these are only available during certain times of year. Another example is woodland amphibian breeding habitat, there is a vernal pool consideration of water being present until at least mid July. Anything that requires a seasonality for study could be delayed but would have to be written up into the process for determining significance. This would have to follow the App. D of NHAG process and scenarios would need to be included for all outcomes for the EIS report. We could discuss this further if this is not clear. What you state below can be delayed with commitments to completing work pre-construction.

Hope this helps,

Regards,

John Boos
Renewable Energy Field Advisor - Biologist
705-755-1748

From: MacKay Ward, Jessica [<mailto:Jessica.MacKayWard@aecom.com>]
Sent: September 27, 2011 9:38 AM
To: Boos, John (MNR)
Cc: Rose, Marc; Cushing, Julia; Bird, Thomas; Kamstra, James
Subject: NextEra - Timing of site investigations for NHA reports

Hi John,

Thank you for the time you spent answering my questions last week regarding our ongoing field work to complete the Site Investigation Reports for the Bluewater, Goshen and Jericho Natural Heritage Assessments. Based on our conversation, I understand the following and would greatly appreciate it if you could please confirm that this is correct with a quick reply to this email.

Soil data:

Soil data is not required to be taken in every ELC polygon. MNR is primarily interested in soils as they relate to the identification of wetlands (although we understand that wetland boundary delineation will follow OWES). We will instruct our field staff to collect soil data only in lowland sites or where the site is potentially a wetland ELC community type.

Prism sweeps:

Prism sweeps are useful in the determination of Bat Hibernacula (Winter Roost and Maternal Colonies), since the criteria for evaluating this type of SWH depends in part on the density of large diameter snags. We will instruct our field staff to collect prism sweep data only in mature forests or sites where there is a relatively high density of large diameter trees.

Timing window for site investigation field work:

Complete site investigations can be undertaken until the leaves are off the trees (generally mid-October), given that it later becomes difficult to see the ground and therefore hard to detect understory plants as well as potential wildlife habitat like vernal pools, rotting logs, etc. After that, partial site investigations can be conducted, including ELC to the ecotype level (as required by MNR) and some indications of candidate significant wildlife habitat. Ideally, this would be done when the ground is not frozen/when there's no snow on the ground, since we can't easily dig soil pits in frozen ground and it obviously becomes very difficult to detect plants/potential habitat features on the ground when it's covered in snow. Depending on the complexity of the site, an additional site visit may be required under more optimal conditions (i.e. in spring/summer). Could you please confirm whether this additional visit can be conducted after submission of the NHA report, provided that a commitment to conduct this work is included in the NHA report and that the EIS lays out mitigation measures that would apply depending on the outcome of the additional field studies?

Many thanks,

Jessica

Jessica MacKay Ward, Ph.D.

Ecologist

AECOM

300 Town Centre Blvd, Suite 300, Markham, ON, L3R 5Z6

Tel: 905-477-8400 ext. 225

Fax: 905-477-1456

Jessica.MacKayWard@aecom.com

Owen, Jennifer

From: Cameron, Amy (MNR) [Amy.Cameron@ontario.ca]
Sent: Monday, May 07, 2012 11:29 AM
To: MacKay Ward, Jessica
Cc: Nix, April (MNR)
Subject: FW: Goshen Tans Line Updated RR - MacDonald Marsh (part 1 of 2)
Attachments: # 83-Macdonald Marsh- vegetation, 1987.pdf; #83 Macdonald Marsh- evaluation 1987.pdf; # 83- Macdonald Marsh, 1987.pdf

Jessica,

Please see the email from April Nix below. This email will be sent in 2 parts. The McDonald Marsh Wetland, although listed as LSW in the attached score sheets, is actually a PSW and Guelph District is currently in the process of updating their records to reflect this. This change is a result of Snapping Turtle being listed as a species at risk since the time of the wetland evaluation.

Thanks,

Amy Cameron

A/Renewable Energy Field Advisor
Renewable Energy Operations Team
Ministry of Natural Resources
31 Riverside Drive, Pembroke
p. 613-732-5506

From: Nix, April (MNR)
Sent: Mon 07/05/2012 11:24 AM
To: Cameron, Amy (MNR)
Cc: Godwin, Chris (MNR)
Subject: RE: Goshen Tans Line Updated RR - MacDonald Marsh (part 1 of 2)

Amy,

Here is the McDonald Marsh Wetland evaluation - I'm sending it in 2 parts as it's too big to fit in one email.

Also the proponents should be advised that while the old evaluation the wetland shows it as an LSW, District staff advise that it be treated as a PSW. Within the evaluation you will note that there is information pertaining to snapping turtle and when the scoring is adjusted to reflect the current status of snapping turtle the OWES scoring totals would reflect that of a PSW. District staff are also in the process of updating this evaluation which will reflect this change.

Cheers,

April

April Nix, BES, MCIP, RPP

Renewable Energy Planning Ecologist

Ministry of Natural Resources, Guelph District

1 Stone Road West

Guelph ON, N1G 4Y2

(P) 519-826-4939

(F) 519-826-6849

email: april.nix@ontario.ca <[mail to: april.nix@ontario.ca](mailto:april.nix@ontario.ca)>

From: Cameron, Amy (MNR)
Sent: May 1, 2012 12:38 PM
To: MacKay Ward, Jessica
Cc: Nix, April (MNR); Bird, Thomas
Subject: Goshen Tans Line Updated RR
Importance: High

Jessica,

Please find attached the MNR records review information for the proposed Goshen Wind Energy Centre transmission study area. Because we don't know exactly where within the study area the transmission line will be located at this point we have indicated "possible" next to some of the features and suggested that they be carried forward to site investigation only if you are within 120m of the feature (or 50m in the case of the Life Science ANSI).

Under the section Species of Conservation Concern you will see that there is reference to Appendix A. This is the same appendix A that you were previously provided with - there is no change to the species on that list.

If you plan to build within 120m of PSWs/Life Science ANSI or within 50m of the Earth Science ANSI you may require additional information available through the district such as ANSI check sheets. Please let me know if you need this information.

Thanks,

Amy

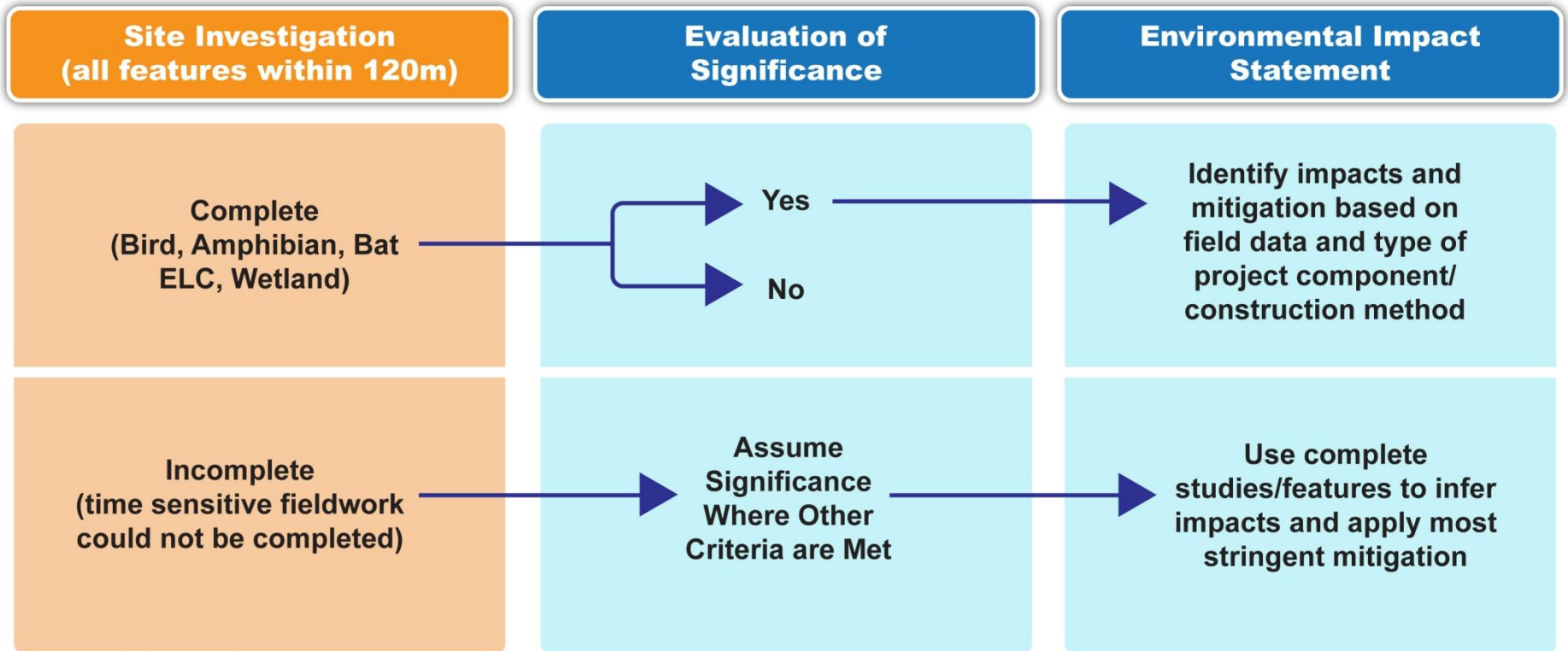
Natural Heritage Assessment – Methodology and Strategy

Ministry of Natural Resources and NextEra Energy Canada
FIT Contract Project Meeting
July 25, 2011

Overview of Methodology and Strategy

- To address data gaps where time sensitive fieldwork could not be completed because of access and/or changing layout
- This approach is based on our professional experience and understanding of MNR expectations/requirements
- We consider this approach to be scientifically defensible because:
 - Extensive time sensitive field surveys have been conducted throughout the study areas
 - Field data has been collected using standard and repeatable protocols
 - Habitat/vegetation information will be standardized and obtained for all natural features

Natural Heritage Assessment

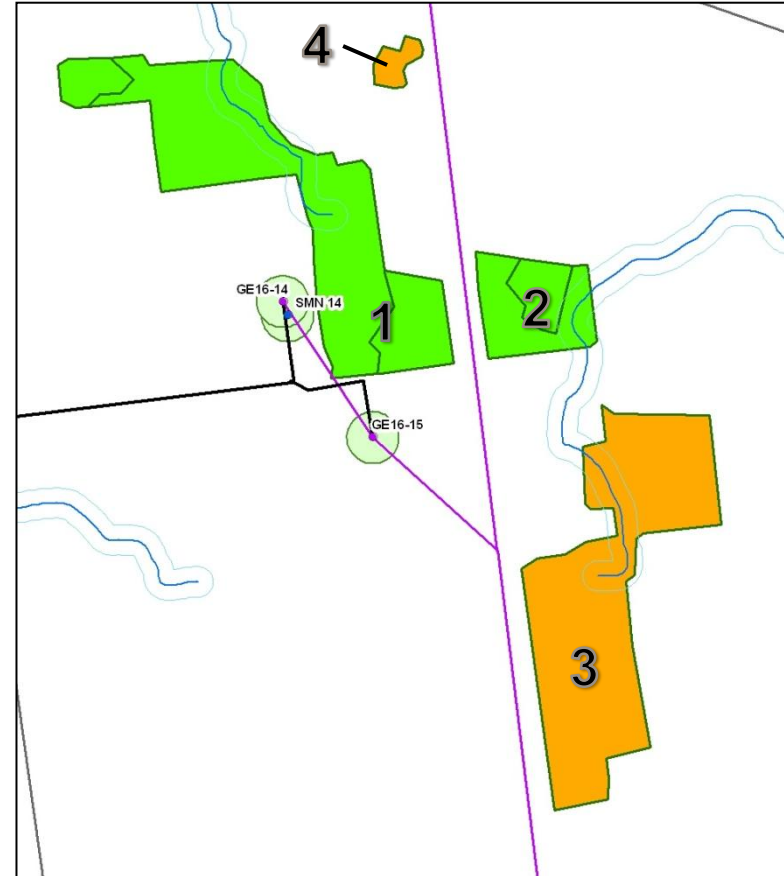


Site Investigation

- *Complete Features* are those that have had:
 - breeding bird surveys,
 - ecological land classification, and
 - if required:
 - amphibian surveys,
 - bat monitoring, and/or
 - wetland classification.
- Impacts of project (i.e. turbines, access roads, t-lines and collection systems) can be accurately assessed.
- *Incomplete Features* are those where not all time-sensitive surveys were conducted during the 2011 field season.
 - Impacts can be assessed using alternative site investigation methodologies.

Illustrative Example

- *Complete Features:*
Breeding bird surveys, amphibian surveys and bat monitoring completed at Features 1 & 2.
- *Incomplete Features:*
Time-sensitive fieldwork incomplete however habitat/vegetation information collected at Features 3 & 4.



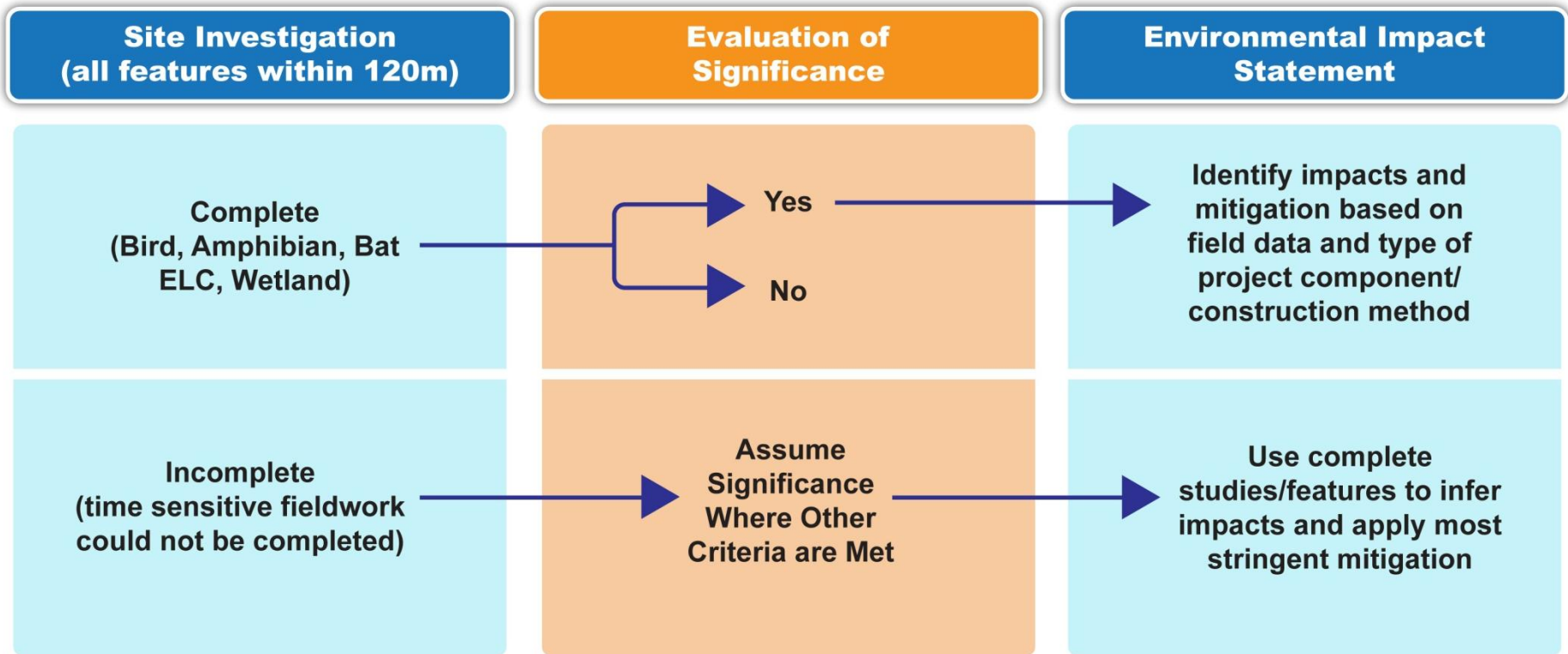
Site Investigation

- This information will be presented in the following format in the NHA report



Feature #	Distance from Project	Total Size (size within 120 m)	ELC Unit	Vegetation Composition	Wildlife				Rare Species	Evaluation of Significance Required?
					Amphibians	Birds	Bats	Other Wildlife		
1	19 m	269.4 ha (2.7 ha)	FOD5-1: Dry-Fresh Sugar Maple Deciduous Swamp Type	Canopy: sugar maple, basswood, black cherry, and American elm. Sub-canopy: sugar maple, white ash, and bitternut hickory....	No calling amphibians present during amphibian surveys.	36 species observed during breeding season surveys, including 2 Forest Area Sensitive spp.	No suitable habitat observed	Suitable salamander habitat observed	No rare species observed	Yes
2	73 m	214.8 ha (3.1 ha)	FOD5-1: Dry-Fresh Sugar Maple Deciduous Swamp Type	Canopy: sugar maple, basswood, and black cherry. Sub-canopy: sugar maple, white ash, and bitternut hickory....	Spring Peeper and Wood Frog recorded during amphibian surveys.	24 species observed during breeding season surveys.	No suitable habitat observed		No rare species observed	Yes

Evaluation of Significance

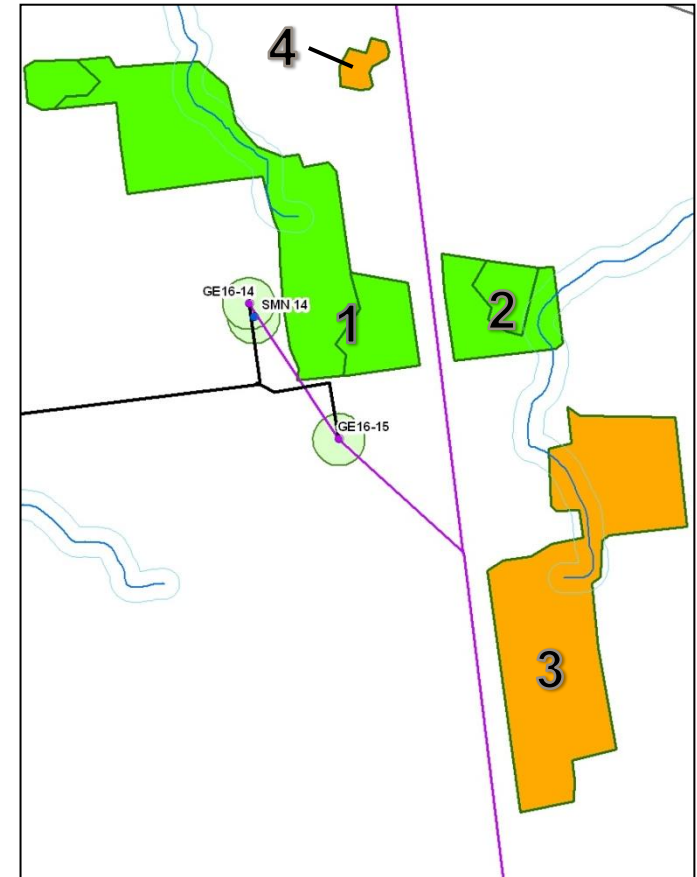


Evaluation of Significance

- Determining Significance of *Complete Features*
 - Using information collected during site investigations, significance will be determined based on criteria established or accepted by MNR (e.g. *Significant Wildlife Habitat Technical Guide*)
- Assuming Significance for *Incomplete Features*
 - Wherever there are data gaps for natural features within 120 metres of the project, significance will be assumed where other criteria are met (e.g. woodland size)

Illustrative Example

- Feature 1 (Complete):
 - Area Sensitive Breeding Bird Habitat
- Feature 2 (Complete):
 - Amphibian Breeding Habitat (Woodland)
- Feature 3 (Incomplete):
 - Contains vernal pools ⇒ assume Amphibian Breeding Habitat (Woodland) present
 - Contains interior forest habitat ⇒ assume Area Sensitive Breeding Bird Habitat present
- Feature 4 (Incomplete):
 - Does not contain amphibian breeding habitat or interior forest habitat ⇒ do not assume significance

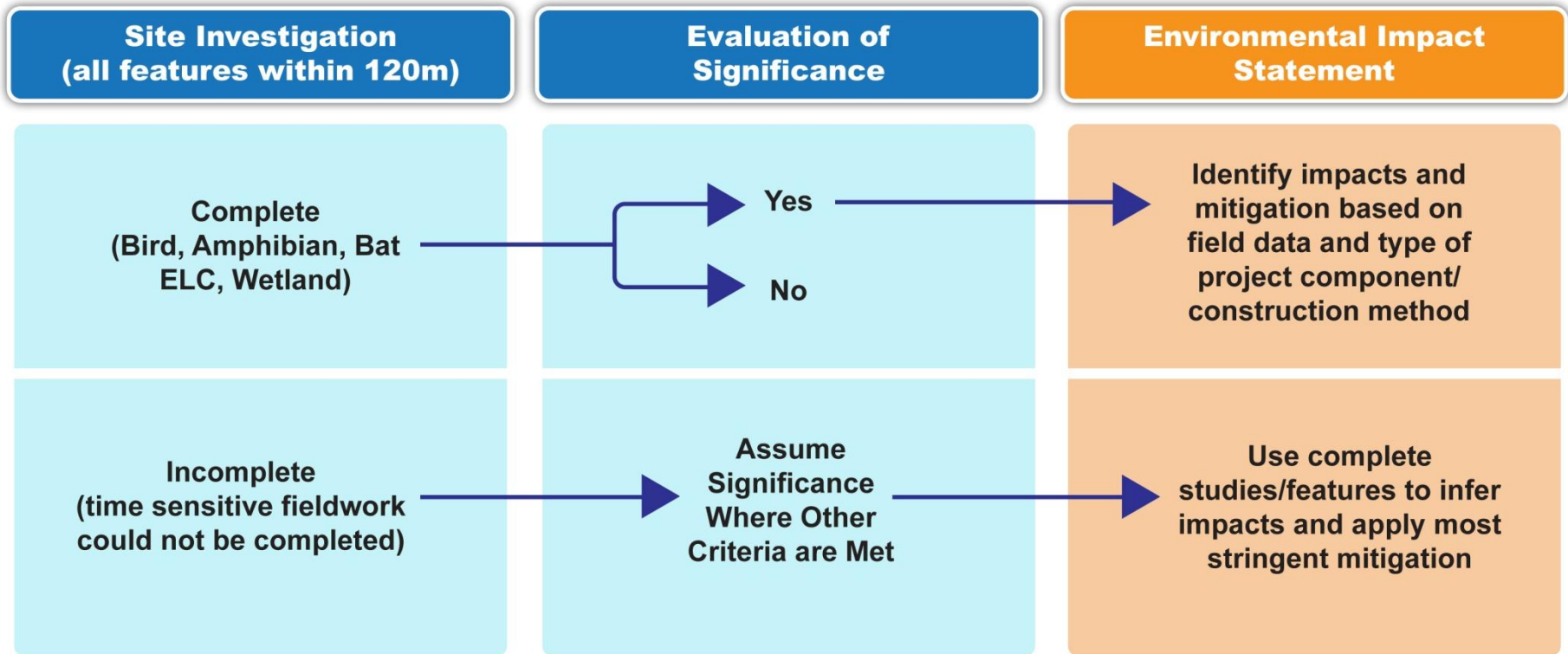


Evaluation of Significance

- This information will be presented in the following format in the NHA report (for Significant Wildlife Habitat)

Type	Habitat	Targeted Species	Summary of Characteristics of the SWH Type	Feature where potential match exists	Assessment of Habitat, Species presence, and Potential to Meet SWH Criteria	Confirmed or Potential SWH
Seasonal Concentration Areas	Amphibian Breeding Habitat (Woodland)	Eastern Newt, Blue-spotted Salamander, Spotted Salamander, Gray Treefrog, Spring Peeper, Chorus Frog, Wood Frog	Presence of wetland, lake or pond within or within 120 m of woodland. One or more targeted species with population of at least 20 individuals.	2, 3	Chorus of Spring Peepers recorded in Feature 2 during amphibian survey. Suitable habitat (vernal pools) observed in Feature 3.	Confirmed in Feature 2. Assumed in Feature 3.
Habitats of Species of Conservation Concern	Area Sensitive Breeding Bird Habitat	Yellow-bellied Sapsucker, Red-breasted Nuthatch, Veery, Blue Headed Vireo, Northern Parula, Black throated Blue Warbler, Black-throated Green Warbler, Scarlet Tanager, Ovenbird, Special Concern Cerulean Warbler	All mature natural stands 10 ha or greater in size. Presence of nesting or breeding pairs of 3 or more of the listed wildlife species. Any site with Cerulean Warbler is considered SWH.	1, 3	Field investigations documented the presence of 2 area sensitive species and one Endangered species in Feature 1, which contains 15 ha of interior forest habitat. Suitable habitat (mature forest with >10ha of interior forest habitat) observed in Feature 3.	Confirmed in Feature 1. Assumed in Feature 3.

Environmental Impact Statement



Environmental Impact Statement for *Complete Features*

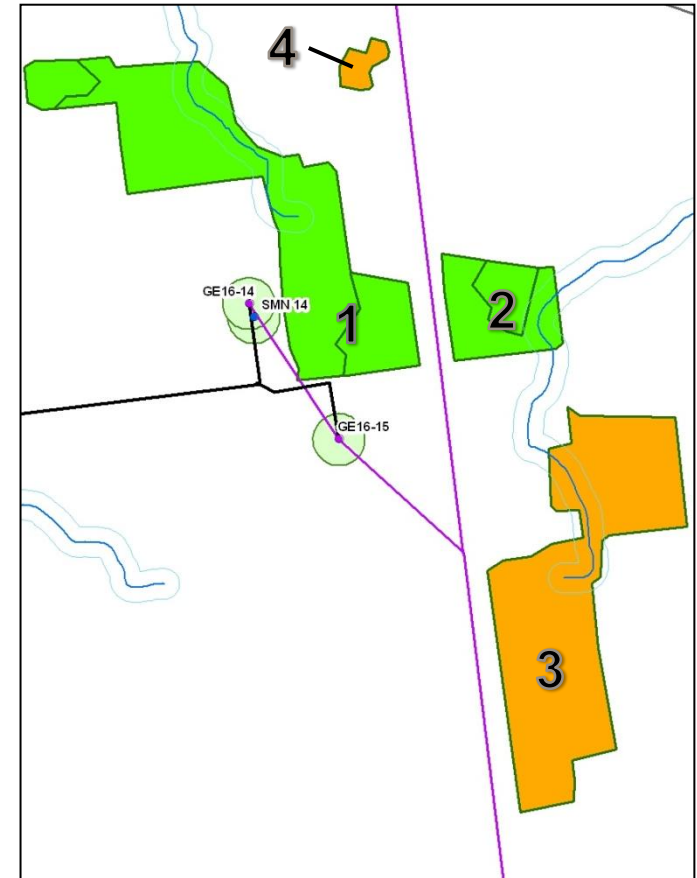
- Features which have been identified as significant will be assessed to determine:
 - Potential effects
 - Mitigation measures
 - Residual effects
 - Significance of residual effects
- Mitigation/Monitoring Commitments from the Construction Plan Report and the Environmental Effects Monitoring Plan will be incorporated into the NHA

EIS for *Incomplete Features*

- In considering potential effects and mitigation:
 - Attributes will be assumed based on site investigations of similar features in the vicinity
 - Where data gaps exist, a conservative approach will be adopted in assessing potential impacts and the corresponding mitigation measures applied

Illustrative Example

- Feature 1 (Complete):
 - Area Sensitive Breeding Bird Habitat
- Feature 2 (Complete):
 - Amphibian Breeding Habitat (Woodland)
- Feature 3 (Incomplete):
 - Contains vernal pools ⇒ assume Amphibian Breeding Habitat (Woodland) present
 - Contains interior forest habitat ⇒ assume Area Sensitive Breeding Bird Habitat present
- Feature 4 (Incomplete):
 - Does not contain amphibian breeding habitat or interior forest habitat ⇒ do not assume significance



Environmental Impact Statement

- This information will be presented in the following format in the NHA report for each project component (turbines, access roads, etc.)

Features	Potential Effects	Mitigation Measures/ Construction Plan Report Commitments	Monitoring Methodology and Commitments	Residual Effects	Significance of Residual Effects
Significant Wildlife Habitat: Woodland Amphibian Breeding Habitat					
2, 3	<ul style="list-style-type: none"> • Vehicle collisions with amphibians on access roads • Noise interference with calling rates • Alteration of surface water flow 	<ul style="list-style-type: none"> • Impose speed limits • Construction outside sensitive timing window • Restrict use to daytime hours • Ensure overland drainage patterns to woodlands are not altered 	None required		
Significant Wildlife Habitat: Area Sensitive Bird Breeding Habitat					
1, 3	<ul style="list-style-type: none"> • Noise impacts to nesting birds . • Removal of vegetation resulting in loss of nesting and foraging habitat 	<ul style="list-style-type: none"> • Impose speed limits • Recommend construction activities to occur outside of avian breeding season window 	<ul style="list-style-type: none"> • Pre-construction Monitoring for nesting birds if construction occurs during the breeding season. 		

Owen, Jennifer

From: MacKay Ward, Jessica
Sent: Wednesday, September 26, 2012 10:18 AM
To: Cameron, Amy (MNR); Reed, Kerry (MNR); Sanders, Erin (MNR); Thompson, Erin (MNR); Cotnam, Erin (MNR)
Cc: Rose, Marc; Bird, Thomas; Aitken, Robert; Epp, Gary
Subject: Goshen Site Investigation & Evaluation of Significance - Meeting Minutes

Hi Amy,

Please find attached the minutes of our teleconference. Action items requiring follow up are in bold and also reproduced below:

- MNR to confirm boundaries of Port Franks and Ausable River Provincially Significant Life Science ANSIs (Jericho NHA).
- MNR to provide 2007 memorandum regarding OWES.
- MNR to provide construction timing date window for winter deer yards.
- MNR to confirm whether footnotes area acceptable for Goshen NHA Table 4.3 (Wetlands EOS).
- AECOM to provide list of changes to be made to Jericho NHA (versus Goshen NHA).
- MNR to confirm requirements for Woodland Amphibian Breeding Habitat EOS surveys.
- MNR to confirm requirements for mapping of Azure Bluet habitat (received, thank you).
- AECOM to forward relevant email correspondence (Red-headed Woodpecker and Azure Bluet mitigation) to Erin Sanders (complete).

Our understanding of changes to be made to Jericho NHA (versus Goshen NHA) are italicized and also reproduced below:

- Table containing start and end times of site investigations will be added to the Site Investigation chapter.
- Reptile hibernacula EOS survey requirements will be confirmed with MNR.
- Table 4.3 (Wetlands EOS) format will be modified.
- Woodland Amphibian Breeding Habitat EOS survey requirements may change (MNR to confirm).

Please let me know of any errors or omissions.

We have prepared a template for our proposed format of Table 4.3 (Wetlands EOS) for Jericho, which is currently undergoing internal review. I will forward that to you shortly.

We kindly request the information from MNR indicated above.



AECOM Minutes of
Meeting-Goshe...

Best regards,

Jessica

Jessica MacKay Ward, Ph.D.
Ecologist
AECOM
300 Town Centre Blvd, Suite 300, Markham, ON, L3R 5Z6
Tel: 905-477-8400 ext. 225
Fax: 905-477-1456
Jessica.MacKayWard@aecom.com

Minutes of Meeting

Date of Meeting	September 19, 2012	Start Time	2:30pm	Project Number	60155032
Project Name	Goshen Wind Energy Centre, NextEra Energy Canada				
Location	Teleconference				
Regarding	MNR Comments on Goshen Natural Heritage Assessment Report				
Attendees	Amy Cameron (MNR), Erin Sanders (MNR), Erin Thompson (MNR), Kerry Reed (MNR), Erin Cotnam (MNR), Tom Bird (NextEra), Gary Epp (AECOM), Rob Aitken (AECOM), Jessica Piette (AECOM), Jessica MacKay Ward (AECOM), Mark Rose (AECOM)				
Distribution	MNR, NextEra, AECOM				
Minutes Prepared By	Jessica MacKay Ward and Jessica Piette				

PLEASE NOTE: If this report does not agree with your records of the meeting, or if there are any omissions, please advise, otherwise we will assume the contents to be correct.

1. Pre-meeting discussion regarding treatment of ANSIs in Jericho NHA

- AECOM inquired about treatment of Port Franks and Ausable River Provincially Significant Life Science ANSIs within 120 m of the Project Location.
- Action Item: MNR (Amy Cameron) to confirm ANSI boundaries have not changed.**

2. Review of MNR Comments on Goshen NHA

- AECOM expressed surprise at many of the comments, which in some cases contradict the direction previously provided by MNR during review of the Bluewater NHA and other consultation prior to submission of the Goshen NHA. ACOM asked whether the same reviewers would be reviewing the Jericho NHA.
- MNR acknowledged that there were some inconsistencies, and certain information did not pass on to MNR reviewers; the goal of the formation of this team is to be more consistent; AECOM should raise inconsistencies with MNR and they will be addressed.
- AECOM indicated that the majority of comments will be accepted. This meeting will focus on addressing those comments that are inconsistent or need of clarification.
- The meeting participants discussed selected MNR comments on the Site Investigation chapter, as summarized in the following table (*difference in MNR direction for Jericho NHA are italicized; action items are in bold*):

Item #	Section/ Page	MNR Comment	Notes From Meeting	Action
3	3.2 / Page 1	Comment: "Date and times of the beginning and end of site investigation and duration of investigation are required"	<ul style="list-style-type: none"> AECOM: Adding these to the body of the report would take a considerable amount of time and effort. Dates of individual site investigations and date range are provided in the report. Start and end times are recorded on field notes. 	Goshen NHA – footnote to be added to Table 3.3 referencing appendix. <i>Jericho NHA – table</i>

Item #	Section/ Page	MNR Comment	Notes From Meeting	Action
			<ul style="list-style-type: none"> MNR: information is within field notes; preference of reviewers is to see it up front, but will not hold up confirmation letter for Goshen. 	<i>to be added to body of report containing this information.</i>
6	3.2.3/ Page 4	<p>Deleted text - "indicator species outlined in Appendix 5 of the OWES manual (MNR, 2002)":</p> <ul style="list-style-type: none"> Appendix 5 of the OWES manual is not a list of wetland species, it is a list of common wetland type indicator species. The appendix is intended to be used to determine if the community is a swamp, marsh, bog or fen. Please ensure that wetland plants as defined in the 2007 memorandum note regarding interpretations of the OWES manual is used in the future. This memorandum is available online within the OWES manuals and discusses the use of the Floristic Quality Index. 	<ul style="list-style-type: none"> AECOM: Requested clarification. The information from this appendix was not the only source to identify wetland species (it was used in conjunction with Wetland Plants of Ontario (Newmaster et al., 1997) and the Coefficient of Wetness Index in Oldham et al. (1995)). AECOM attempted to find the memorandum identified however were unable to do so. AECOM requested the document. MNR: Looking for reference to the 2007 memorandum to be added. Assessment was done correctly, but missing a reference. 	<p>AECOM to add reference.</p> <p>MNR (Erin Sanders) to provide 2007 memorandum.</p>
22	3.2.6/ Page 7	<p>Added text (an additional reference) - "Draft SWH Ecoregion 6E Criterion Schedule (MNR, 2012)"</p>	<ul style="list-style-type: none"> AECOM: Clarification requested. AECOM used both Ecoregion criterion schedules, and took most inclusive/conservative thresholds where they differ. MNR: Approach is acceptable. Report should reference both criterion schedules. 	AECOM to ensure report references both criterion schedules.
29	3.2.6.1/ Page 11	<p>In Table 3.2, added Type of Candidate Significant Wildlife Habitat: "Deer Yarding Areas"</p> <p>Added text bullet into table –</p> <p>For Characteristics of the SWH Type:</p> <ul style="list-style-type: none"> "ELC community series providing a thermal cover component for a deer yard would include: FOM, FOC, SWM, and SWC, or these ELC Ecosites: CUP2, CUP3, FOD3 and CUT" <p>For Methods of Assessment:</p> <p>Comment: "There is no survey required for this habitat type, it just needs to be reported, documented properly and mitigation applied in the EIS if warranted."</p>	<ul style="list-style-type: none"> AECOM: Hay Swamp deer wintering area is a Stratum 2 deer yard. Our understanding is that only core or Stratum 1 deer yards are considered significant, therefore this should not have been carried forward from records review. This contradicts direction previously provided by MNR regarding identification of deer yards (J. Boos; Nov 14, 2011): "This is unnecessary as the District will provide Deer yard habitat that is considered to be significant. This needs to be picked up at Records Review from the District." MNR: Hay Swamp needs to be carried forward. EOS completed by MNR. Boundaries mapped by MNR. AECOM: What mitigation measures would be required? MNR: Construction timing for access road to be outside winter. NextEra: Requested specific dates. 	<p>AECOM to add Deer Yarding Areas to Site Investigation, Evaluation of Significance and EIS.</p> <p>MNR (Amy Cameron) to provide construction timing date window for winter deer yards</p>
47	3.2.6.1/ Page 31	<p>Comment regarding Little Brown Bat:</p> <ul style="list-style-type: none"> This species is not listed as SI-S3 SH, or SC. Please remove from species of conservation concern section. What you can do instead is in the bat maternity and hibernacula sections address the species that will be considered specifically (northern long-eared bat, little brown bat, tricoloured bat, eastern small-footed bat (and big brown too if you want). This way, if there is a status change for these species to conservation concern, they will be covered. 	<ul style="list-style-type: none"> AECOM: MNR has listed bat species assessed as Endangered by COSEWIC as SOCC for other projects (e.g. Jericho). Please confirm whether/how these are being treated consistently across REA projects. MNR: SOCC results section for this species should refer to sections for Bat Hibernacula and Bat Maternity Colonies. 	AECOM to ensure SOCC section follows this direction.
59	3.3.3/ Page 64	<p>Comments regarding Table 3.5:</p> <ul style="list-style-type: none"> Wetland communities are to be 	<ul style="list-style-type: none"> AECOM: This table was added to the Bluewater NHA in response MNR comments 	AECOM to add wetland

Item #	Section/ Page	MNR Comment	Notes From Meeting	Action
		<p>delineated using OWES.</p> <ul style="list-style-type: none"> The communities listed in Table 3.5 were delineated using ELC and as a result several wetland communities have been overlooked. Please revise the wetlands section to include delineation of wetlands using OWES and update table 3.5 as needed. 	<p>and reflects MNR direction received at that time. Revisions would take considerable about of effort. The information requested is already present in the report (EOS section).</p> <ul style="list-style-type: none"> MNR: Comment refers to Table 3.35 (corrections to records review): need to add wetland communities as indicated in comments pertaining to Table 3.35 to Table 3.5. Revision to format of data in Table 3.5 not required. 	<p>communities to Table 3.5 as indicated based on MNR comments on Table 3.35, where appropriate.</p>
61	3.3.3/ Page 64	<p>Comments regarding “with isolated” and riverine being the most commonly observed site type:</p> <ul style="list-style-type: none"> It is not common that the majority of the site types would be isolated unless there are a number of bogs, fens or marshes associated with ponds or small kettle lakes. It is likely that many of the swamps are not in fact isolated but have outflow or inflow that is intermittent or only occurs at certain times of year, such as spring melt or following a high rainfall event. All drainage patterns were to be delineated on field maps to assist with determining site type, hydrological connections and assists with creating complexes. Furthermore, wetlands with watercourses passing through them are not riverine unless the flow in the watercourse is permanent. If the watercourse is incised or is a dug ditch and flow does not surpass the top of the bank and flood the wetland then the community should not be called riverine. Correct identification of hydrology is necessary to ensure appropriate mitigation for the wetland is in place. Please review field data and verify the site types for areas stated as isolated or riverine and complete any necessary revisions to table 3.5. 	<ul style="list-style-type: none"> AECOM: clarification requested. These recommendations would require a significant amount of work. MNR: Most wetlands in the area are known to be palustrine, not isolated. Multiple visits (e.g. after high rainfall) would be required to confirm “isolated” site type (this is out of AECOM’s scope). 	<p>AECOM to reclassify wetlands from “isolated” to “palustrine”.</p>
64	3.3.4/ Page 70	<p>Comment regarding Table 3.6, Forest Community Type in WOD-001:</p> <ul style="list-style-type: none"> It would be preferable if the vegetation communities were addressed on a feature basis. A Natural Area would then be defined as woodland, wetland, cultural meadow, valleyland, SWH, ect. 	<ul style="list-style-type: none"> AECOM: Clarification requested. MNR: Revision to the Goshen report not required, comment for consideration for future reports. AECOM: Report broken into feature-specific sections to facilitate MNR review. 	<p>None required.</p>
65	3.3.6/ Page 104	<p>Comment regarding wildlife habitat:</p> <ul style="list-style-type: none"> Candidate habitat should not be deemed not SWH and ruled out in the SI, if potential habitat is present and meets the criteria it should be carried forward to EOS for determination of significance. 	<ul style="list-style-type: none"> AECOM: Clarification requested. This was the approach taken by AECOM. MNR: Mainly in reference to reptile hibernacula section. DSS should not be used to identify candidate SWH. 	<p>AECOM to revise reptile hibernacula section.</p>
74	3.3.6.1/ Page 113	<p>Comments regarding Reptile Hibernacula:</p> <ul style="list-style-type: none"> If candidate hibernacula features are identified as per the SWHTG and the Ecoregional criteria schedules are found during SI they should be investigated 	<ul style="list-style-type: none"> AECOM: Contradicts previous direction regarding snake hibernacula. MNR: 30 m buffer to be included as part of “habitat”. Where Project Location is outside 30 m buffer, impacts can be mitigated, and no monitoring is required. 	<p>Goshen NHA - AECOM to revise reptile hibernacula section.</p> <p><i>Jericho NHA –</i></p>

Item #	Section/ Page	MNR Comment	Notes From Meeting	Action
		further during EOS. The SWH DSS is only used after SWH is confirmed and mitigation measures are being sought during the EIS for developing in and around SWH <ul style="list-style-type: none"> The feature in which the hibernacula is located plus a 30m buffer is the SWH 	<ul style="list-style-type: none"> AECOM: Will consider all as candidate SWH and apply mitigation with no monitoring commitments. MNR: This approach is acceptable, however, could still choose to complete hibernacula surveys to rule candidate SWH out. 	<i>Need to let MNR know if same approach will be taken for other projects.</i>
82	3.3.6.1/ Page 114	Comments regarding Colonial Nesting Birds: <ul style="list-style-type: none"> The heronry is located adjacent the 120m area of investigation. SWH for a heronry is defined as a 300m radius from the edge of the colony or the edge of the vegetation community. Turbine 56 and associated components are located 120m from the heronry. This type of SWH cannot be called Generalized as per Appendix C of the NHAG. 	<ul style="list-style-type: none"> AECOM: What are MNR expectations for pre-construction, during construction and post-construction monitoring at this feature, given that we do not have permission to access the property? MNR: Post-construction mortality monitoring will be required at this turbine. No additional monitoring required. MNR: Why not all swamp habitats considered? AECOM: Through consulting with MNR, distinguishing feature was the identification of nests. MNR: Make this clear in report. 	AECOM to revised report. AECOM to ensure report clearly states that nests were searched for in all suitable Ecosites and no other nests were observed.
85	3.3.6.1/ Page 114	Comment regarding statement - "This type of Significant Wildlife Habitat was not carried forward to the Evaluation of Significance: <ul style="list-style-type: none"> Brewer's Blackbird should be carried forward to EOS 	<ul style="list-style-type: none"> AECOM: AECOM conducted grassland breeding bird surveys. We did not find that species. MNR: Site Investigation should document and map candidate habitat; Evaluation of significance should report results of breeding bird surveys in candidate SWH. 	AECOM to revised report.
106	3.3.6.2/ Page 142	Comment regarding Marsh Breeding Bird Habitat: <ul style="list-style-type: none"> All wetland habitat is to be considered as long as there is shallow water with emergent aquatic vegetation present 	<ul style="list-style-type: none"> AECOM: Looking for sites with open water >30 cm deep. MNR: Discussion needs to be framed by criteria, e.g. amount of open water and emergent vegetation, not size. 	
107	3.3.6.2/ Page 142	Comment regarding Marsh Breeding Bird Habitat: <ul style="list-style-type: none"> ET comment: For Green Heron you need to consider all SW and CUM1 sites as well and there are several present on the map in or within 120 m of the project location 	<ul style="list-style-type: none"> AECOM: Why are CUM1 polygons included for Green Heron? MNR: Report should specify that CUM1s were considered but no evidence of use was observed, therefore can be rules out. Need to show that all appropriate ELC communities were considered. AECOM: What about dug ponds within CUM1? MNR: Dug ponds should be considered if left long enough to become naturalized and have abundant emergent vegetation. 	AECOM to revise report.
111	3.3.6.2/ Page 142	Changed text – "10 ha" to "30 ha": <ul style="list-style-type: none"> Habitats where interior forest breeding birds are breeding, typically large mature (>60 years old) forest stands or woodlots >30ha, interior habitat is at least 200m from forest edge habitat 	<ul style="list-style-type: none"> AECOM: Threshold was selected because it is the most conservative of thresholds between Ecoregion 6E and 7E criterion schedules. MNR: Both criterion schedules have same threshold. 	AECOM to revise report.
120	3.3.6.2/ Page 145	Comment regarding Terrestrial Crayfish: <ul style="list-style-type: none"> Confirmed SWH Defining criteria- presence of 1 or more individuals of species listed or their chimneys (burrows) in suitable marsh meadow or terrestrial sites 	<ul style="list-style-type: none"> AECOM: Contradicts previous direction regarding terrestrial crayfish. MNR: Approach taken was acceptable. 	None required.
122	3.3.6.2/ Page 145	Comment regarding Table 3.26: <ul style="list-style-type: none"> Criterion schedule says that SWH includes chimneys in suitable marsh OR terrestrial sites, so please continue to 	<ul style="list-style-type: none"> AECOM: Contradicts previous direction regarding terrestrial crayfish. MNR: Approach taken was acceptable. 	None required.

Item #	Section/ Page	MNR Comment	Notes From Meeting	Action
		consider all. All these can be generalized anyway by the looks of it, but please make sure		
134	3.3.6.3/ Page 170	<p>Comment regarding Red-headed Woodpecker:</p> <ul style="list-style-type: none"> This paragraph defines RHW0 habitat that includes small woodlots, orchards, swamps etc. (which is accurate) but then only investigates mature woodlands for suitable habitat. Please consider all the areas described here that would be suitable. If none of these areas are within the project location, they can be generalized. If any of them are within the project location, add them to the table and continue with their evaluation. 	<ul style="list-style-type: none"> AECOM: This would require a lot of work to change (e.g. report mapping, etc) and would not impact end result as all woodlands where tree removal is proposed were treated as CSWH for bird SOCC and woodland breeding bird surveys were conducted - RHW0 were not observed at other locations where tree removal is proposed. MNR: Report should refer to treatments of all locations where tree removal is proposed as habitat for bird SOCC here. Generalized candidate SWH should also be mapped. 	AECOM to revise report.

- The meeting participants discussed selected MNR comments on the Evaluation of Significance chapter, as summarized in the following table (*difference in MNR direction for Jericho NHA are italicized; action items are in bold*):

Ite m #	Section/ Page	MNR Comment	Notes From Meeting	Action
4	4.2.2/ Page 4	<p>Comment regarding Table 4.2:</p> <ul style="list-style-type: none"> Table 4.2 only discusses the sources to be used and does not indicate what the criteria actually are; only the criteria headings have been provided. Please insert the criteria to be used to determine the woodland significance. 	<ul style="list-style-type: none"> AECOM: Clarification requested. Does this mean the criteria in the NHAG should be reproduced here? Can we instead reference the NHAG? MNR: Not clear that all criteria were applied; need to add missing pieces. Clarification of methods as per other comments (e.g. 200 m versus 100 m) is also required. 	AECOM to revise Table 4.2
18	4.2.4.1/ Page 7	<p>Comment regarding Protocols to Evaluate or Study Candidate SWH:</p> <ul style="list-style-type: none"> Seeps/springs info regarding significance? 	<ul style="list-style-type: none"> AECOM: Clarification requested. Seeps and springs were generalized candidate SWH. MNR: No change required. 	None required.
20	4.2.4.1/ Page 10	<p>Comment regarding Larval Surveys Changed "May or June" to "May and June" in 3.</p>	<ul style="list-style-type: none"> AECOM: protocol has previously been confirmed by MNR. MNR: Second visit not required. Surveys could have been conducted through both months. Not clear when surveys were done. 	AECOM to add dates of surveys to report.
23	4.2.4.1/ Page 14	<p>Comment regarding, "Locations of point count stations were marked on an aerial map, flagged in the field, and UTM data was recorded"</p> <ul style="list-style-type: none"> A map showing the locations of these cSWH with locations of point counts would be helpful 	<ul style="list-style-type: none"> AECOM: Is this necessary, given UTM's and maps are provided in field notes? MNR: Would be nice but not required. 	None required.
28	4.3.1/ Page 17	<p>In Table 4.3, Comments regarding columns: Flood Attenuation (Total), Water Quality Improvement, Shoreline Erosion Control, and Groundwater Recharge (Total):</p> <ul style="list-style-type: none"> A text description for this analysis should be provided as opposed to rankings. Items that could be discussed are the proportion of wetland area vs. catchment area, location within the watershed, and if 	<ul style="list-style-type: none"> AECOM: The approach taken here is the same as that taken in the approved Bluewater NHA. Text descriptions of each ranking are provided in Table 4.1. AECOM suggested these descriptions be added as footnotes to Table 4.2 for clarification. Scoring was not completed, as per Appendix C of NHAG. MNR: Add catchment area size (degree of flood attenuation). Will follow up regarding table format and use of footnotes. Same format not to be used for Jericho. 	<p>Goshen NHA – AECOM to add catchment area size for each wetland.</p> <p>MNR (Erin Sanders) to confirm table format and use of footnotes.</p>

Item #	Section/ Page	MNR Comment	Notes From Meeting	Action
		<p>the wetland is isolated (scores the maximum for flood attenuation) or another site type.</p> <ul style="list-style-type: none"> Without a reference scale, it is not clear what the rankings are saying about the wetlands ability to attenuate floods and what mitigation is needed. Those categories with (Total) as part of the tile should include the total score for that component along with the text description. Please correct the four highlighted categories. 	<ul style="list-style-type: none"> AECOM: Suggested text descriptions to be included instead of rankings for Jericho NHA. 	<p><i>Jericho NHA – Table format to be changed.</i></p> <p>AECOM to provide list of changes to be made in Jericho NHA (versus Goshen NHA)</p>
29	4.3.1/ Page 17	<p>In Table 4.2, Comment regarding columns: Fish Habitat (Total):</p> <ul style="list-style-type: none"> This column requires more information, please refer to the OWES manual and indicate the type of fish habitat that is present and its significance. Detailed information will assist with determining required mitigation measures. 	<ul style="list-style-type: none"> AECOM: The approach taken here is the same as that taken in the approved Bluewater NHA. Fish habitat data was obtained from water bodies team. If fish habitat is present, it is considered significant for the purposes of this report. Mitigation for fish habitat is addressed in water bodies report. MNR: Table should include “low marsh”, “high marsh” or “swamp”. 	<p>AECOM to revise table to include “low marsh”, “high marsh” or “swamp”.</p>
33	4.3.1/ Page 17	<p>In Table 4.2, for WET-012, Determination of Significance column: “Treated as Significant”:</p> <ul style="list-style-type: none"> These wetlands have been stated to be provincially significant, therefore Appendix C of the NHAG does not apply as an OWES file exists for these communities which provides the detailed information needed for the EIS. All information for evaluated wetlands should be removed from Table 4.3. 	<ul style="list-style-type: none"> AECOM: The boundaries of the PSWs as evaluated do not correspond with the wetland boundaries as mapped by AECOM (e.g. new portion added to Hay Swamp near transmission line crossing). These new portions of the wetlands occurring within 120 m of the Project Location are not described in the original OWES evaluation, therefore information has been provided here to allow for these features to be appropriately addressed in the EIS. MNR: Approach is acceptable. Include explanation as stated. 	<p>AECOM to include explanation as stated.</p>
39	4.3.5.3/ Page 22	<p>Comment regarding this section (Bat Maternity Colonies):</p> <ul style="list-style-type: none"> The area of the habitat includes the entire woodland or the forest stand ELC ecosite containing the maternity colonies 	<ul style="list-style-type: none"> AECOM: Clarification requested. MNR: SWD communities should not be included (only FOM or FOD). 	<p>AECOM (and NRSI) to revise report.</p>
40	4.3.5.4/ Page 22	<p>Comment regarding Woodland Breeding Habitat:</p> <ul style="list-style-type: none"> The habitat is the woodland (ELC polygons) and wetland (ELC polygons) combined and a travel corridor connecting the woodland and wetland polygons is to be included within the habitat 	<ul style="list-style-type: none"> AECOM: Does the travel corridor include agricultural lands? MNR: Minimum width and land use are described in criterion schedule. 	<p>AECOM to revise report.</p>
41	4.3.5.4/ Page 22	<p>Comment regarding Amphibian Woodland Breeding Habitat:</p> <ul style="list-style-type: none"> I need some clarification about the surveys- dates of the surveys must be provided and the 3 surveys need to be carried out. 	<ul style="list-style-type: none"> AECOM: protocol has previously been confirmed by MNR. Water deepest on 1st visit; not likely to miss window for Spring Peepers - if not there then not likely to be SWH. MNR to follow up on this. 	<p>MNR to follow up. May be different requirements for Jericho NHA.</p>
45	4.3.5.9/ Page 27	<p>Comment regarding Habitat Bird Species of Conservation Concern:</p> <ul style="list-style-type: none"> Does this map delineate the feature according to the requirements of the schedule (the area of the habitat to the 	<ul style="list-style-type: none"> AECOM: Entire natural area was considered as SWH for Red-Headed Woodpecker. MNR: Approach is acceptable in this case, given small size of woodland. In larger natural areas, may be more than required. 	<p>None required.</p>

Item #	Section/ Page	MNR Comment	Notes From Meeting	Action
		finest ELC scale that protects the habitat form and function is the SWH, this must be delineated through detailed field studies)? If so, please describe how the habitat was delineated in this paragraph and if necessary, refine the location on the map		
46	4.3.5.10/ Page 27	Comment regarding Habitat of Insect Species of Conservation Concern: • Please describe how this habitat was delineated as well (same as above comment)	<ul style="list-style-type: none"> • AECOM: These were mapped as ponds. • MNR: would like to see it delineated; suitable habitats with buffer that would protect the habitat form and function. • AECOM: 10 m setback from pond in EIS, where no vegetation will be removed. Include this 10 m buffer as habitat? • MNR: Will follow up on this. • AECOM: AECOM has had previous email correspondence regarding mitigation at this location. 	<p>MNR to confirm treatment of 10 m setback as habitat.</p> <p>AECOM to forward relevant email correspondence to MNR (Erin Thompson).</p>

Owen, Jennifer

From: MacKay Ward, Jessica
Sent: Monday, November 26, 2012 4:54 PM
To: Cameron, Amy (MNR); Beal, Jim (MNR)
Cc: Bird, Thomas; Rose, Marc; Kamstra, James
Subject: Goshen NHA - Summary of Today's Conference Call

Hi Amy and Jim,

Please find below a summary of today's conference call regarding the Goshen NHA:

1. EOS surveys for amphibian SWH:
 - MNR requested all 3 call surveys be completed.
 - Initial area search and night call surveys were conducted at two sites (AWO-04 and AWO-17) however, as no amphibians were observed, these sites were not carried forward to subsequent surveys. This approach was previously approved by MNR in the Bluewater NHA. Subsequent surveys are not considered necessary for these sites as water is deepest on the first visit, and it is unlikely that the window for Spring Peepers was missed - if this species is not present, the feature is not likely to be SWH (there might be some frogs but not the required densities or species richness).
 - MNR agreed that this approach was reasonable. Amy Cameron will confirm that there are no specific concerns associated with the two sites (AWO-04 and AWO-17).
2. Crane paths:
 - MNR requested locations.
 - Cranes will be moved across agricultural fields, likely within disturbance areas for collection lines.
 - If there is no infrastructure required, then MNR is not concerned. AECOM to revise EIS to indicate that no temporary or permanent infrastructure will be required for crane paths. No other action required.
3. Directional drilling beneath wetlands & woodlands:
 - MNR requested changes to the Project Location to avoid these crossings; asked how deep the cable will be installed.
 - Changes to the project location at this point are problematic because all studies (e.g. NHA, archeology, water bodies) have been completed for the currently layout only. The location of project infrastructure is also limited by a number of factors including placement on properties with signed leases and landowner preference. No changes will be made to the Project Location at this time.
 - The following explanation has been added to the EIS: Drilling depth will be determined based on site-specific geotechnical conditions and would take into account soil type, soil variances and porosity, as derived from exploratory borehole information. No other action required.
4. Wetland & woodland mitigation:
 - MNR requested wetland feature-specific mitigation; questioned method of determination for 5 m buffer based on land use and topography.
 - Table 5.2 has been reformatted according to wetland features – these have been grouped where appropriate (e.g. according to distance to construction activities, whether directional drilling is proposed).
 - MNR confirmed method of assessing land use and topography in determining minimum setbacks to wetlands. No other action required.
5. Compensation plan for tree removal in significant woodlands:
 - MNR provided details of a compensation plan in an email.
 - AECOM asked whether it is enough to specify that the Plan will be submitted to MNR for approval, given that some of the details provided may be overly restrictive at this stage.
 - AECOM to revise EIS to indicate that the compensation plan will be developed in consultation with MNR.
6. Construction timing windows for SWH:

- MNR specified a number of timing windows for specific SWH types.
 - AECOM has made modifications to the timing windows provided by MNR in some cases (e.g. for Tundra Swans).
 - AECOM to provide a rationale for any changes to timing windows when re-submitting the EIS. No other action required.
7. MNR reviewer for SWH sections of the Goshen EIS:
- Kerry Reed will not be reviewing the SWH sections of the re-submitted Goshen NHA.
 - MNR will re-assign these sections to another reviewer tomorrow morning.
 - The new SWH reviewer will contact AECOM once assigned.
 - MNR will ensure that the new reviewer will be looking to confirm that Kerry's comments have been addressed and not provide additional comments.

Please let me know if I have missed or misinterpreted anything.

Thank you and regards,

Jessica

Jessica MacKay Ward, Ph.D.
Ecologist
AECOM
300 Town Centre Blvd, Suite 300, Markham, ON, L3R 5Z6
Tel: 905-477-8400 ext. 225
Fax: 905-477-1456
Jessica.MacKayWard@aecom.com

Ministry of Transportation

Ministry of Transportation

Engineering Office
Corridor Management Section
West Region

659 Exeter Road
London, Ontario N6E 1L3
Telephone: (519) 873-4597
Facsimile: (519) 873-4228

Ministère des Transports

Bureau du génie
Section de gestion des couloirs routiers
Région de l'Ouest

659, chemin Exeter
London (Ontario) N6E 1L3
Téléphone: (519) 873-4597
Télécopieur: (519) 873-4228



July 29, 2010

AECOM
300 Town Centre Boulevard, Suite 300
Markham, Ontario,
L3R 5Z6

via email only
Julia.Cushing@aecom.com

Attn: Julia Cushing, Environmental Planner

RE: NextEra Energy
Bluewater, Goshen and Jericho Wind Energy Centre Proposals

The Ministry of Transportation (MTO) have reviewed the Draft Project Description Report (the report) for the above-noted Wind Energy Centre Proposals. In addition to the Oversize / Overwidth Permit requirements of MTO noted the Section 6 of the report, the following outlines MTO's general permit requirements established in the *Public Transportation and Highway Improvement Act (PTHIA)*, and several project specific requirements / recommendations.

General Requirements**Building and Land Use Permits**

When developing sites next to a provincial highway, a Building and Land Use Permit may be required from the MTO. In general, buildings and other structures associated with wind farms must be set back from the highway property line a minimum of 14 m. In the case of wind turbines, the set-back is increased to the height of the mast plus the length of a propeller blade. Please refer to the Project Specific Requirements noted at the end of this letter for the limits of MTO permit control.

Entrance Permits

Existing and proposed access connections to the provincial highway shall require an Entrance Permit which will stipulate the access design, conditions of use, and current ownership. Entrance permits are non-transferable; therefore, new land owners will be required to obtain new Entrance Permits. Where access to a property can be obtained via a municipal road, a new entrance to the provincial highway will not be permitted. Certain visibility and safety concerns must be addressed before an Entrance Permit will be issue. In addition to the above-noted Entrance Permit, a Temporary Entrance Permit may be required for the construction phase, which according to the report would require an 11m wide access road.

Sign Permits

Signs, not limited to temporary construction signs and development signs which are visible from the provincial highway may require a MTO Sign Permit. The type, size, and location of all signs shall be approved by MTO prior to their installation.

Encroachment Permits

MTO Encroachment Permits are required for any construction within the provincial highway right-of-way.

The parallel installation of cables, fibre optics, and hydro poles will not be permitted within the highway right-of-way. Parallel installations shall be setback 14m from the highway right-of-way. MTO may permit a perpendicular crossing of a highway (aerial or buried), the location of which is subject to MTO review and approval. MTO will not permit any open cuts in the highway; all cables shall be bored, and will require MTO review and approval not limited to engineering drawings and geotechnical investigations.

Minor modifications to a provincial highway for equipment transportation, is subject to MTO review and approval and will require a MTO Encroachment Permit. Construction of improvements shall be the responsibility of the proponent (financially and otherwise). Typically, modifications to the provincial highway will require the proponent to prepare contract drawings, tender, and construct the improvements. Improvements shall be constructed in accordance with MTO design standards, and shall follow the Class Environmental Assessment for Provincial Transportation Facilities. A legal agreement secured by a Letter of Credit will also be required.

Project Specific Requirements

Bluewater Wind Energy Centre – Huron County

- Highway 4 and Highway 8 may be impacted by the Bluewater Wind Energy Centre.
- Ensure that any reference to London Road is changed to Highway 4.
- MTO Building and Land Use permits are required for all new developments located within 45m of our highway right-of-way and located within a 180m radius of the centreline intersection of Highway 4 and any municipal road.

Goshen Wind Energy Centre – Huron County

- Highway 21 north of Grand Bend is adjacent to the west limit of the Goshen Wind Energy Centre.
- Ensure that any reference to Lakeshore Road is changed to Highway 21;
- MTO Building and Land Use permits are required for all new developments located within 45m of our highway right-of-way and located within a 395m radius of the centreline intersection of Highway 401 and any municipal road.

Jerico Wind Energy Centre – Lambton County

- Highway 401 and Highway 21 may be affected by the Jerico Wind Energy Centre;
- Ensure that any reference to Lakeshore Road is changed to Highway 21;
- MTO Building and Land Use permits are required for all new developments located within 45m of our highway right-of-way and located within a 395m radius of the centreline intersection of Highway 401 and any municipal road;
- Access to Highway 401 shall not be permitted;
- MTO Building and Land Use permits are required for all new developments located within 45m of our highway right-of-way and located within a 395m radius of the centreline intersection of Highway 21 and any municipal road.

The decommissioning of each facility may also require permits from the MTO. MTO should be contacted during the decommissioning stage to see which permits, if any, are required.

Additional information including standard permit conditions, permit application forms, current fee structure may be viewed using the following link:

<http://www.mto.gov.on.ca/english/engineering/management/corridor/index.shtml>

Please keep us informed as you move through the Renewable Energy Approval (RDA) process. Should you require any clarification to the above, please do not hesitate to call.

Regards,



John Morrisey
Corridor Management Planner
Planning and Design Section
Southwestern Region, London

- c. S. McInnis, Head - Corridor Management Section
- I. Smyth, Corridor Management Planner - Corridor Management Section
- S. Barnabie, Corridor Management Officer - Corridor Management Section
- J. Pegelo, Corridor Management Officer – Corridor Management Section
- J. Graham-Harkness, Regional Contracts and Operations Engineer – Contracts & Operations Office

Reference: www.canadianwindproposals.com.

**Ministry of
Transportation**

Operations Office
West Region

659 Exeter Road
London, Ontario N6E 1L3
Telephone: (519) 873-4372
Facsimile: (519) 873-4734

**Ministère des
Transports**

Bureau d'Operations
Région de l'Ouest

659, chemin Exeter
London (Ontario) N6E 1L3
Téléphone: (519) 873-4372
Télécopieur: (519) 873-4734



Nextra Energy Canada
5500 North Service Rd, Suite 205
Burlington, ON, L7L 6W6

8/29/2012

Dear: Derek Dudek

Re:

The Ministry of Transportation (ministry) controls all encroachments within the provincial highway right-of-way, this includes any installation or other work upon, over or under, or within these limits.

The ministry's control of encroachments is intended to maximize highway safety, maintain the free flow of traffic and minimize the likelihood that an encroachment may interfere with any highway maintenance operations or future reconstruction or expansion of the highway corridor.

All work within the provincial highway right-of-way shall be subject to the approval of the ministry. The approval of encroachments is controlled by issuance of a permit by the ministry under the authority of the *Public Transportation and Highway Act* (section 31). An encroachment permit or any other permit or any approval required by the ministry shall be obtained for each encroachment before any work commences. The following link details the encroachment permit application process:

<http://www.mto.gov.on.ca/english/engineering/management/corridor/encroach.shtml>

The ministry encourages proponents to contact us during the planning process to discuss specific details of the proposed works, the required permits and the application process.

If you have any questions or require further assistance with the application process, please contact the undersigned.

Yours truly,

A handwritten signature in black ink, appearing to read "R. Mentley".

Ryan Mentley
Technical Services Officer
Operations Office
West Region

*Ministry of Health and
Long Term Care*



**Ministry of Health
and Long-Term Care**

Public Health Division
Public Health Policy and
Programs Branch
21st Floor, 393 University Avenue
Toronto ON M7A 2S1

Telephone: 416 314-5487
Facsimile: 416 327-7438

**Ministère de la Santé
et des Soins de longue durée**

Division de la santé publique
Direction des politiques et
des programmes de santé publique
393 avenue University, 21^e étage
Toronto ON M7A 2S1

Téléphone : 416 314-5487
Télécopieur : 416 327-7438

July 17, 2012

Mr. Derek Dudek, Community Relations Consultant
NextEra Energy Canada, ULC
5500 North Service Road, Suite 205
Burlington ON L7L 6W6

Dear Mr. Dudek:

Thank you for your letter with regard to the above project proposal.

Public Health Policy and Programs Branch is interested in the public health aspects of this proposal and wishes to be kept informed of any further developments. The local board of health has a more direct role in reviewing these matters and we recommend that you advise them of this proposal. For your convenience, we have provided the contact information of the appropriate local medical officer of health for the area in which the proposal is located.

Dr. Nancy Cameron
Medical Officer of Health
Huron County Health Unit
Health & Library Complex, RR #5
77722B London Road
Clinton ON N0M 1L0

Yours truly,

Paul McCue
Senior Program Consultant
Public Health Policy and Programs Branch

c: Dr. Nancy Cameron

Ministry of Attorney General

**Ministry of the
Attorney General**

Crown Law Office
Civil Law

720 Bay Street
8th Floor
Toronto ON M7A 2S9

Tel/Tél: (416) 326-4930
Fax/Télé.: (416) 326-4181

**Ministère du
Procureur général**

Bureau des avocats
de la Couronne Droit civil

720 rue Bay
8^e étage
Toronto ON M7A 2S9

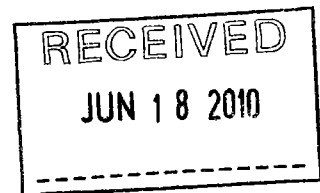
Please refer to File
S.V.P. Se référer au dossier
No.



June 16, 2010

VIA REGULAR MAIL

Tom Bird
Environmental Services Project Manger
NextEra Energy Canada, ULC
5500 North Services Road, Suite 205
Burlington, ON L7L 6W6



Dear Mr. Bird:

**Re: Jericho Wind Energy Centre - Municipality of Lambton Shores, Lambton
Goshen Wind Energy Centre – Municipalities of Bluewater & South Huron
Bluewater Wind Energy Centre – Municipality of Bluewater**

Thank you for your Notices, received in our office June 15, 2010. Please be advised that I have not been the contact person on these inquiries for over a year and my name should be removed from your mailing list.

Inquiries and communications such as yours are handled by Aboriginal and Ministry Relationships Branch of the Ministry of Aboriginal Affairs.

I have forwarded your letter to that Branch and ask that you direct further questions to that office. The address is:

Ministry of Aboriginal Affairs
160 Bloor Street East, Suite 900
Toronto, ON M7A 2E6
Tel.: 416-326-4740

Yours truly,

E. Ria Tzimas
Counsel
Ministry of the Attorney General
Crown Law Office – Civil

Nav Canada

From: Csatlos, Christopher <Chris.Csatlos@navcanada.ca>
Sent: Thursday, January 17, 2013 2:20 PM
To: Vogliano, Jaclyn
Cc: Ontario Region, Transport Canada; Bishop, Michelle; Faiella, Benjamin; Bob Wright, Grand Bend - CPL4; Cathy Forsyth
Subject: 12-3494: 72-turbine wind farm (Goshen Wind Energy Centre) - Dashwood, ON
Attachments: 12-3494 Letter to proponent-1.pdf; 12-3494 Construction Start Notice.pdf; 12-3494 Turbine Coords.xls

Categories: Red Category

Hello Jaclyn,

Please find attached a letter from NAV CANADA regarding your 72-turbine wind farm (Goshen Wind Energy Centre) submitted on 2012-08-29.

We ask that you notify us at least 10 business days prior to the start of construction. This notification requirement can be satisfactorily met by returning a completed, signed copy of the attached form and spreadsheet. If you have any questions, please don't hesitate to contact me.

Sorry for the delay.

Regards,

Christopher Csatlos

Supervisor - Land Use Office

Aeronautical Information Services, NAV CANADA

tel (613) 248-4162 / toll-free (866) 577-0247

fax (613) 248-4094

e-mail: Chris.Csatlos@navcanada.ca



January 17, 2013

Your file
Goshen Wind Energy Centre
Our file
12-3494

Ms. Jaclyn Vogliano
Nextera Energy Canada, ULC
5500 North Service Road, Suite 205
Burlington, ON
L7L 6W6

**RE: Wind Farm: 72-turbine wind farm - Dashwood, ON
(N43° 19' 15.76" W81° 39' 47.94" / 426.5092' AGL / 1286.0893' AMSL)**

Ms. Vogliano,

Evaluation of the captioned proposal indicates that construction of the proposed wind farm would require the following modifications to Air Navigation System:

- Centralia, ON (CYCE) aerodrome:
 - 'VOR/DME A' instrument approach procedure: Increase to circling minimum decent altitude (MDA) for Category D aircraft to 1560 feet above sea level (ASL) or 736 feet above ground level (AGL).
 - Runway 28 departure procedure: 360 feet/nautical mile minimum climb gradient to 1400 ASL.
- Grand Bend, ON (CPL4) aerodrome:
 - Increase to the obstacle Clearance Circle (OCC) altitude to 2300 feet ASL.

Based on the results of our evaluation, NAV CANADA has no objection to the project as submitted.

The nature and magnitude of electronic interference to NAV CANADA ground-based navigation aids, including RADAR, due to wind turbines depends on the location, configuration, number, and size of turbines; all turbines must be considered together for analysis. The interference of wind turbines to certain navigation aids is cumulative and while initial turbines may be approved, continued development may not always be possible.

In the interest of aviation safety, it is incumbent on NAV CANADA to maintain up-to-date aeronautical publications and issue NOTAM as required. To assist us in that end, we ask that you notify us at least 10 business days prior to the start of construction. This notification requirement can be satisfactorily met by returning a completed, signed copy of the attached form and spreadsheet by e-mail at landuse@navcanada.ca or fax at 613-248-4094. In the event that you should decide not to proceed with this project or if the structures are dismantled, please advise us accordingly so that we may formally close the file.

If you have any questions, contact the Land Use Department by telephone at 1-866-577-0247 or e-mail at landuse@navcanada.ca.

NAV CANADA's land use evaluation is valid for a period of 12 months. Our assessment is limited to the impact of the proposed physical structure on the air navigation system and installations; it neither constitutes nor replaces any approvals or permits required by Transport Canada, Industry Canada, other Federal Government departments, Provincial or Municipal land use authorities or any other agency from which approval is required. Industry Canada addresses any spectrum management issues that may arise from your proposal and consults with NAV CANADA engineering as deemed necessary.



Yours truly,

A handwritten signature in black ink, appearing to read "Chris Csatlos".

Christopher Csatlos
for
David Legault
Manager, Data Collection
Aeronautical Information Services

cc ONTR - Ontario Region, Transport Canada
Michelle Bishop, Director – Government and Public Affairs, NAV CANADA
Benjamin Faiella, Nextera Energy Canada, ULC
CYCE – Centralia aerodrome
CPL4 – Grand Bend aerodrome

Construction Start Notification

File Information		
NC File No 12-3494	TC File No	Proponent File No Goshen Wind Energy Centre
To: NAV CANADA, Land Use 1601 Tom Roberts Ave. P.O. Box 9824 Stn T Ottawa, ON K1G 6R2 E-mail: landuse@navcanada.ca Fax: 613-248-4094	From:	Ms. Jaclyn Vogliano Nextera Energy Canada, ULC 5500 North Service Road, Suite 205 Burlington, ON L7L 6W6
Site Information:	Nearest town: Dashwood, ON Latitude (N) N43° 19' 15.76" Longitude (W) W81° 39' 47.94" Ground (above sea level) 859.5801 ft Structure Height (above ground level) 426.5092 ft Total Height (above sea level) 1286.0893 ft	
Construction Timeline		
In the interest of aviation safety, NAV CANADA must be notified at least 10 days in advance of the start of construction. Please enter the construction start date (and end date if required) in the space provided below along with any lighting and marking information (as required by Transport Canada).		
Construction start date: (permanent structures)	<input style="width: 100%;" type="text"/>	
Construction dates/times: (temporary structures or cranes)	From: <input style="width: 100%;" type="text"/>	To: <input style="width: 100%;" type="text"/>
Daily Usage Times – Indicate date/times for which the crane will be in operation up to the maximum height		
Structure Lighting and/or Marking		
All objects, regardless of their height, that have been assessed by Transport Canada as constituting a hazard to air navigation require marking and/or lighting in accordance with the CARs (Canadian Aviation Regulations) and should be marked and/or lighted to meet the standards specified in <u>CAR 621</u> .		
Structure will have temporary lighting during construction:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If no, please provide anticipated date for permanent lighting system to be operational:	<input style="width: 100%;" type="text"/>	
Structure will have permanent lighting upon completion:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Structure will be marked upon completion:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
I hereby certify that the location, height/elevation, construction dates, as well as lighting and marking information contained herein to be true and accurate.		
Name	Signature	
Title	Date	

OFFICE USE ONLY:

AIS Office: IPDU YYZ	Advise AIS: Yes
NOTAM: Yes	CYCE: VOR/DME A: CAT D CIRCLING CYCE: DEP PROC: CLIMB GRADIENT

January 2, 2013