

BLUEWATER WIND ENERGY CENTRE

Natural Heritage Assessment Report Summary

MARCH 2012

Varna Wind Inc., a wholly owned subsidiary of NextEra Energy Canada, ULC (NextEra) is proposing to construct a wind energy project in the Municipalities of Bluewater and Huron East in Huron County, Ontario (see map on back page). The project will be referred to as the Bluewater Wind Energy Centre (the "Project") and will be located on private lands in the vicinity of the shoreline of Lake Huron. While NextEra is seeking a Renewable Energy Approval (REA) for 41 wind turbines, only 37 are proposed to be constructed for the Project.

The purpose of the Natural Heritage Assessment Report is to first identify ecologically significant natural features (for example, important wildlife habitat) within 120 metres (m) of the proposed Project Location (the Project Location is defined as the outer limit of where disturbance may occur due to construction or operation of the Project), and then to determine potential effects, mitigation natural features. Residual effects are "left over" effects once mitigation measures have been applied.



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RECORDS REVIEW

Information gathered during this stage of the process was used to determine if there are any of the following natural features within the Study Area:

- ✦ Provincial Parks and Conservation Reserves;
- ✦ Wetlands;
- ✦ Woodlands;
- ✦ Valleylands;
- ✦ Rare species and significant wildlife habitats; and,
- ✦ Areas of Natural and Scientific Interest (ANSIs).

This involved contacting the Ministry of Natural Resources (MNR), the Ministry of the Environment (MOE), the local Conservation Authority and the Municipalities to obtain any records they keep of these natural features within the Study Area.

SITE INVESTIGATION

After the Records Review, Site Investigations were conducted to confirm that the findings of the Records Review were correct, to identify any additional natural features not documented in the Records Review, and finally to define the boundaries and characteristics of the features (for example, what types of plants and animals live in a particular woodland).

The results of the Site Investigation revealed:

- ✦ 9 unevaluated wetlands/wetlands complexes (unevaluated wetlands have not yet gone through the process of determining if they are locally or provincially significant, or not significant);
- ✦ 40 woodlands;
- ✦ 1 valleyland; and,
- ✦ 27 Candidate Significant Wildlife Habitats, including important habitats for bats, snakes, frogs and birds.

These natural features were carried forward to the evaluation of significance stage.

EVALUATION OF SIGNIFICANCE

At this stage, natural features are evaluated to determine if they are significant according to provincial criteria. If a feature is determined to be significant, an Environmental Impact Study (EIS) must be conducted to identify potential effects, propose mitigation measures and described how the potential effects will be addressed through the environmental effects monitoring plan.

Of the natural features identified through the Site Investigation, the following were determined to be significant and therefore will be addressed in the EIS:

- ✦ 9 wetlands;
- ✦ 31 woodlands;
- ✦ 1 valleyland; and,
- ✦ 22 Candidate Significant Wildlife Habitats, as well as generalized candidate significant wildlife habitats.

ENVIRONMENTAL IMPACT STUDY

For each natural heritage feature identified as significant, potential effects were assessed and mitigation measures/monitoring commitments proposed depending on the type of project infrastructure affecting the feature.



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Below is a summary of some of the potential effects, mitigation measures and monitoring commitments from the effects assessment. For the full effects assessment, please refer to the Natural Heritage Assessment Report.

POTENTIAL EFFECTS FROM CONSTRUCTION/DECOMMISSIONING

- ✦ Increased erosion, sedimentation and turbidity (i.e. an increase in soil in wetlands, water bodies and other significant features) from clearing vegetation for construction of access roads, temporary crane paths, etc. To avoid or lessen these effects erosion control fencing will be used and kept in place until the disturbed areas are stabilized, all stockpiled materials will be kept away from the features and periodic monitoring will occur during construction to ensure compliance with these mitigation measures.
- ✦ Damage to vegetation while operating construction equipment. To avoid or lessen these effects, protective fencing will be installed around construction areas to ensure that no work occurs outside the identified zones, and periodic monitoring will occur during construction to ensure compliance.
- ✦ Soil and water contamination from accidental spills of oils, gasoline or grease. To avoid or lessen these effects, a spill response plan will be developed to outline steps to be taken to contain any chemicals and avoid contamination of features. The Design and Operations Report contains an Emergency Response and Communication Plan which outlines action to be taken should a spill occur; including notifying the MOE's spills Action Centre, if required, and the local municipalities.



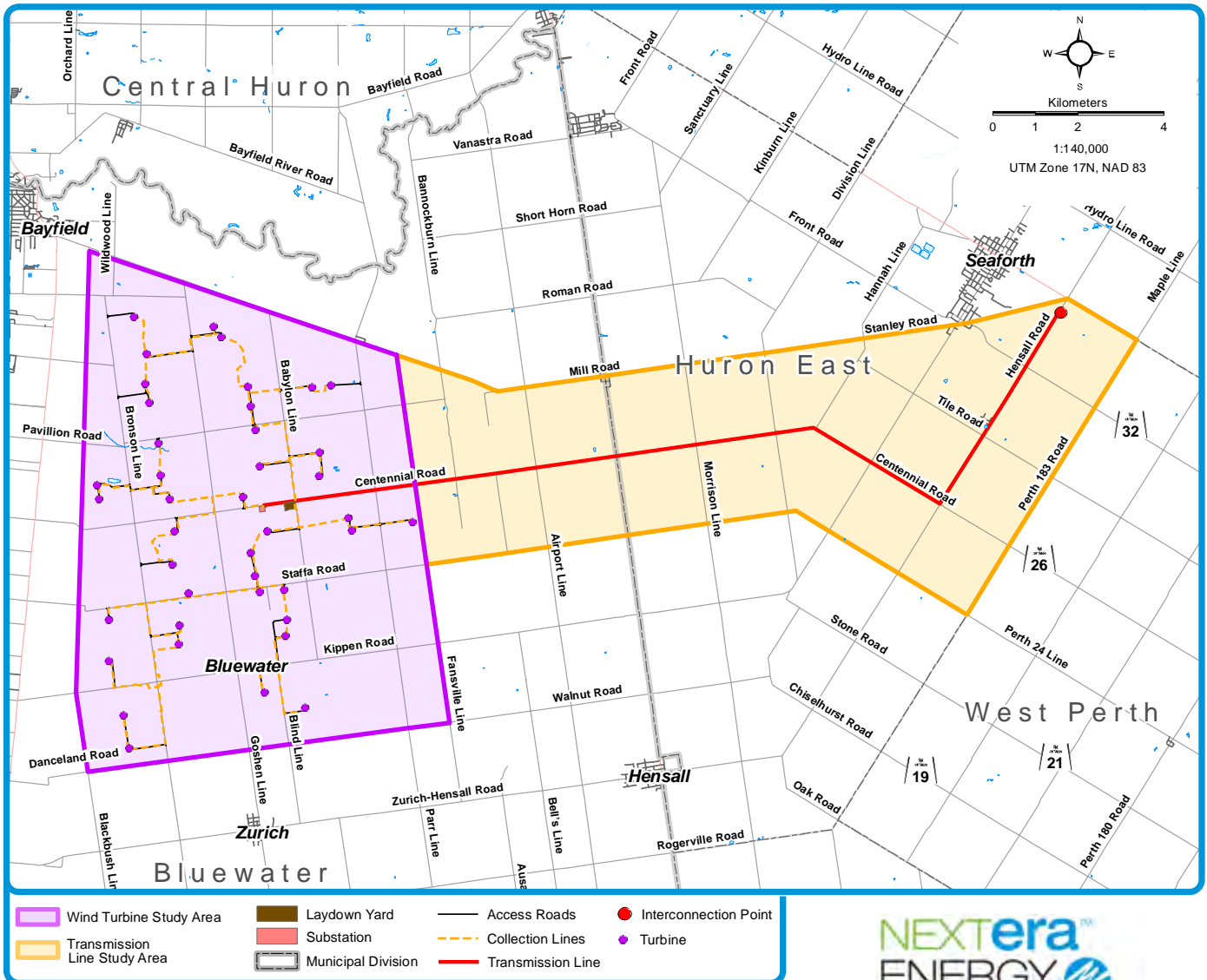
POTENTIAL EFFECTS FROM OPERATION

- ✦ Disturbance or mortality to wildlife (e.g. birds and bats) from collisions with turbines. To avoid or mitigate these effects, operational mitigation techniques may take place. Mitigation techniques could include periodic shut-down of turbines when there is an increased potential for bird or bat collisions. Monitoring will consist of three year post-construction mortality surveys for birds and bats which will be submitted to the MNR.

The overall conclusion of the Natural Heritage Assessment Report is that this Project can be constructed and operated without any remaining effects that could harm the environment. Post-construction monitoring related to effects on wildlife, including birds and bats, will be undertaken to confirm this conclusion.

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Have A Question?

We hope you find this Plain Language Summary helpful. In case you would like additional information or have any questions, please contact us directly:

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