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February 12, 2013
File: Port Ryerse Wind Farm (160960778)

Alymer District MNR
615 John Street North
Aylmer, ON
N5H 2S8

Attention: **Jason Webb (MNR)**
Jim Beal (MNR)
Adam Rosso (Boralex Inc.)

Reference: **Port Ryerse Wind Farm:**
Bald Eagle Winter Perching Habitat Survey Results

As part of the Environmental Impact Study for the Port Ryerse Wind Project, the candidate significant wildlife habitat of Bald Eagle Winter Perching Habitat was treated as significant, with mitigation commitments contingent on the results of pre-construction surveys. This process followed the Natural Heritage Assessment Guide, Appendix D (MNR 2011).

Stantec Consulting Inc. carried out the pre-construction field surveys for this habitat in the fall/winter of 2012/2013. The following memo details the methods and results for these surveys.

Methods

In the winter of 2011, during the field investigations for the Natural Heritage Assessment, one immature and two adult Bald Eagles (*Haliaeetus leucocephalus*) were observed perched on a white pine (*Pinus strobus*) along the shore of Lake Erie, located approximately 230 m southeast of T4. This tree is part of the woodlot community which is located within 120 m of the Project Location. No nest or nesting behaviour was observed and no adults were observed during breeding season (March to August), consequently this site does not meet the criteria for a candidate Bald Eagle and Osprey Nesting, Foraging and Perching Habitat (OMNR, 2012); however, it is considered candidate significant wildlife habitat for Bald Eagle as a species of conservation concern.

The presence of a Bald Eagle using this perching tree annually would make this habitat significant. Methods approved by the MNR on September 26, 2012, follow the 'behavioural study' guidelines provided in the December 2011 *Bird and Bird Habitats: Guidelines for Wind Power Projects* (MNR 2011). The habitat would then be delineated based on the behaviour of observed Bald Eagles: the areas used by the Bald Eagles for perching plus the surrounding vegetation communities (determined by Ecological Land Classification), protecting the habitat function and form, will then constitute the significant habitat.

The candidate perching tree was surveyed three times in winter 2012/2013, which consisted of one visit every three weeks beginning in mid-December. Visits included a 3-hour survey starting in late morning through early afternoon, focused on this tree and the surrounding habitat. Severe weather and poor visibility conditions were avoided and therefore influenced the timing of the surveys.

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A 3-hour survey focused on the perching tree and surrounding habitat was conducted from a nearby vantage point. The observer was situated in or near the vehicle in order to reduce stress on any perched Bald Eagles. Binoculars were used for observations. Three vantage points were chosen on the first survey, and repeated as possible in the subsequent surveys. The vantage points were chosen at each survey based on proximity to and view of the habitat as well as winter road conditions. These locations are shown on Figure 1.

Observers recorded the following information: date, names of observers, time (start and end for each survey), weather conditions (temperature, % cloud cover, Beaufort wind scale, visibility, precipitation), GPS point of observation, species observed, behaviour (foraging, mobbing, migration, flying , perching, perched on ground, swimming), number of passes, height category (using tree/woodlot or fly-over), flight direction, direction, and distance from user. Although these surveys targeted Bald Eagles, all bird observations were recorded.

Criteria for Significance

This type of habitat is not described specifically in the Draft Significant Wildlife Habitat Ecoregion 7E Criteria Schedule, but is related directly to Bald Eagle, a species of conservation concern. The criteria used to determine significance would be the annual use of perching habitat. Annual use was deemed to be proven with two consecutive years of use observed. If this habitat met this criterion, the mitigation proposed in the EIS will be required.

Survey Dates and Times

Surveys were conducted on December 13, 2012 from 10:48-13:48; January 4, 2013 from 10:20-13:20; and February 5, 2013 from 11:15-14:15. The final survey was conducted more than three weeks later than the second survey due to inclement weather and high precipitation which would have reduced visibility.

Results

During the December 13, 2012, survey, one immature Bald Eagle was observed circling along the shoreline to the west of the observation station (see Figure 1). A second observation, likely of the same bird, was made later during the survey flying west along the shoreline. On both occasions, the eagle was observed flying along the shoreline and did not land or perch. Other observations included 3 Double-crested Cormorants, 10 Herring Gulls, 3 Dark-eyed Juncos, 1 Great Black-backed Gull, 50 blackbird sp. and 1 Northern Harrier.

No Bald Eagles were observed during the January 4, 2013 survey. Other observations included 10 duck sp., 1 Herring Gull, 1 Blue Jay, 33 American Crows, 32 Canada Geese, 1 Rock Pigeon, 1 Red-tailed Hawk, 1 Northern Harrier and 1 Cooper's Hawk.

No Bald Eagles were observed during the February 5, 2013 survey. Other observations included 26 American Crows, 1 Black-capped Chickadee, 11 Horned Larks, 1 Rough-legged Hawk and 1 Red-tailed Hawk.

Conclusions

Based on the results of the three surveys conducted, it is confirmed that this habitat is not significant based on lack of observed use of perched Bald Eagles in the candidate Bald Eagle Winter Perching Habitat. Post-construction monitoring and the mitigation as proposed in the EIS will not be required.

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Sincerely,

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