VAUXHALL-POTTERSBURG EIS

VAUXHALL-POTTERSBURG EA: EEPAC REVIEW OF DRAFT ENVIRONMENTAL IMPACT STUDY

Document dated August, 2016

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INTRODUCTION

In addition to the recommendations contained in the document, EEPAC provides the following recommendations.

THEME #1 – Protecting Cat Tail Marsh

EEPAC notes that on Figure 3, this Marsh is about 30 metres from the location of the pipe pathway. It is unclear how wide the construction corridor will be or if the directional drilling section includes the area closest to the marsh. According to Appendix E, there are no *Phragmites* or loosestrife in this marsh.

Recommendation 1: The marsh should be protected by a 30 m buffer from construction because it is a regionally rare vegetation community. Only 1.5% of all landscapes noted by Bergsman and DeYoung in 2006 were MAS.

THEME #2 - Chimney Swift

The report notes Swifts foraging in the area (page 16). It seems likely that barn swallows are nesting within 200 m of the flyover observation sites, if they typically forage within 200 m of a nest, we would expect there is some suitable nesting habitat within the study area, but perhaps not observed from the chosen stations. Given the amount of city owned land in the area, consideration be given to the following recommendations.

Recommendation 2: Identify and protect cavity trees in the area.
Recommendation 3: Construct a swift tower and provide in the Environmental Enhancement Plan funds for recordings to attract swifts (see Appendix)
Recommendation 4: Construct barn swallow habitat on city lands with appropriate educational signage.

THEME #3 - Environmental Management Plan and Enhancement Plan

Pg 36: EEPAC would be cautious about assuming net positive impact if trees will be disturbed/removed. It could be positive long-term, but this will depend on the success of mitigation.

Pg 38: "The preferred pathway alignment will avoided wooded areas where possible" - Can you be more specific? The buffer width should be specified in the detail design.

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Pg 39: Based on the known pathway alignment, any trees predicted to be negatively affected should be replaced (or compensated by planting somewhere else in the City owned lands) as soon as possible to allow for some maturation time (saplings do not provide the same habitat as mature trees).

Recommendation 5: A City Ecologist review and approve these Plans as it is noted in the document that they are proposed to be prepared only at the detail design phase.

THEME #4 – Official Plan Changes

It appears that the study has reviewed sections of the Thames River corridor that were previously unevaluated patches (see study Appendix, copy of Schedule B-1 of the City's Official Plan. It would appear that the EIS did not evaluate them for significance but the work done by the Consultant would, on the face of it, confirm that the sections north of the river are Significant.

Recommendation 6: The City initiate an Official Plan amendment to Schedule B-1 to show the previous unevaluated lands as Significant.

THEME #5 – Land Acquisition

Although the City owns large parts of the study area and lands adjacent, there are opportunities to protect features that might not be otherwise protected such as the Cattail Marsh and the butternut tree on private land.

<u>Recommendation 7:</u> The City acquire lands adjacent to other city land identified in the study as being Significant.

Theme #6 – Recommended Additional Survey Work

On page 20, the report notes that the SWH criteria for Turtle Wintering Area was not assessed.

<u>Recommendation 6:</u> Conduct a turtle wintering survey early in the spring of 2017 (March-April) if any construction is to take place near to potential SWH for Turtle Wintering Areas.

On page 23 the SAR butterfly West Virginia White is mentioned: "This species is found only in early spring." Unless it is migratory, the caterpillars have to live somewhere.

<u>Recommendation 7:</u> Conduct a search of larval host plants for the West Virginia White (SAR species) after spring.

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EEPAC notes there is no discussion of other (non-butterfly) SAR insects (e.g. there are a number of beetles and odonates) Without the information from the OMNRF on SAR records (see page 25 which notes that as of August 2016, the consultant had not received SAR records from the Ministry), EEPAC feels the survey work is incomplete.

Recommendation 8: Conduct surveys for SAR beetles and odonates. https://www.ontario.ca/environment-and-energy/species-risk-type?name=Insects

APPENDIX

Zanchetta, C., D. C. Tozer, T. M. Fitzgerald, K. Richardson, and D. Badzinski. 2014. Tree cavity use by Chimney Swifts: implications for forestry and population recovery. *Avian Conservation and Ecology* **9**(2): 1.

http://dx.doi.org/10.5751/ACE-00677-090201

ABSTRACT

The Chimney Swift (Chaetura pelagica) is an aerial insectivore and a cavitynesting/roosting specialist designated as threatened in several jurisdictions. As the occurrence of suitable chimneys declines, Chimney Swifts may increasingly nest and roost in tree cavities. It is therefore important to identify characteristics of suitable nest or roost trees and assess their frequency of occurrence. We reviewed 59 historic and modern records of trees used by Chimney Swifts to understand characteristics of suitable nest or roost trees. Chimney Swifts used at least 13 different deciduous and coniferous tree species. All of the trees were greater than 0.5 m diameter at breast height (DBH) and were described as hollow or having cavities. Nest or roost tree height was $12.7 \pm 7.0 \text{ m}$ (mean \pm SD; range: 3.6-28.0 m; n = 25) and DBH was $1.0 \text{ m} \pm 0.5 \text{ m}$ (range 0.5–2.1 m; n = 21). According to our description of used trees, the number of suitably hollow Chimney Swift nest or roost trees may be two to three times higher, although still rare, in most unlogged compared to logged hardwood forests. Whether the current total supply of suitable nest or roost trees is sufficient to carry the anticipated increase in use by Chimney Swifts as chimney habitat is modified or deteriorates is unknown. Monitoring the frequency of use of tree cavities by nesting and roosting Chimney Swifts over time, and more robustly quantifying the availability of suitable tree cavities in different forest types for nesting and roosting Chimney Swifts, particularly in unlogged versus logged forests, are fruitful areas for future research.

CHIMNEY SWIFT TOWERS

There have generally been poor results from the artificial Chimney Swift towers built in North America. However, it appears that to have any success, birds must be lured to the tower by playing swift calls from a recording.