

Review of: **VMP Extension Environmental Assessment  
Terrestrial and Aquatic Ecosystems  
Reports**

as prepared by Ecoplans; March 2013

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April 2013

## **TERRESTRIAL REPORT**

### **Significant Habitat**

The report is commended for considering the existence of and the requirements regarding Significant Wildlife Habitat. Most EIS' submitted to the City fail to consider this issue despite being mandated by both provincial policy and London Official Plan policy.

### **Significance of Woodland in NE quadrant**

- 1) The report should clearly state the reasoning as to why the NE Woodland is not considered significant. Without this information, the reader can not evaluate any part of the report dealing with the woodland.

### **Maintaining Leaf and Forest Cover within the City**

Over 40% of the NE woodland is proposed to be removed. Regardless of the significance of the woodland, this represents another loss of forest cover and ecological function within the City. As the subject land seems to be City owned, there is no reason why the woodland can not be expanded to the north and east to replace the portion being lost.

- 2) The NE Woodland should be replanted on the north and east sides to replace the area lost due to construction.

### **Loss of Habitat for Species at Risk**

The NE woodland is suggested to function as satellite habitat for Wood Thrush and Eastern Wood Peewee. Removal of this habitat is likely to have adverse affect on both species even if their core habitat is the SE woodland.

Conversely, the NE woodland may in fact provide nesting habitat for these species and the SE woodland may function as a satellite habitat in order to compensate for the smaller size of the NE woodland.

Two species at risk will be eliminated from the NE woodland due to its size reduction.

- 3) The replacement replanting of the NE woodland should be done with the specific goals of ultimately recreating suitable habitat for the species at risk displaced: wood thrush and Eastern Wood PeeWee

### **Animal Movement Corridor under VMP Extension**

The use of an animal movement corridor is commended. EEPAC is interested in learning further details of the construction and functioning of the proposed terrestrial bench features of the waterway crossing.

- 4) EEPAC requests further design detail, including if the proposed design is a standard of some form
- 5) Where else has the proposed design been utilized and is there any post installation monitoring data which speaks to effectiveness of the proposed design?
- 6) What plans are in place in this instance for the post installation monitoring of the movement corridor? EEPAC requests that monitoring be conducted to confirm that the features of the corridor (e.g. benches, fencing, wingwalls) do in fact function as proposed.

### **Concrete Retaining Wall in SE Woodland**

Instead of constructing concrete retaining wall as proposed (which includes an additional 5m of impact disturbance due to construction), consideration of a soil stabilization system such as Envirolok ([www.envirolok.com](http://www.envirolok.com)) is suggested. Such a system can provide the required structural performance but also be vegetated to function as part of the local ecosystem.

- 7) Consider technology such as Envirolok over concrete for the retaining wall.

### **Scientific Names and References**

- 8) This type of research (the collection of field data to document existing conditions of the natural environment) needs to follow standard scientific methodology. All methods in section 2.2.2 should have a literature reference:
  - a) Add reference for mammal survey methodology, and explain why no mammal surveying was done at night when most mammals are active.
  - b) Add reference for the snake survey methodology, and explain why no snake surveying was done at night.
  - c) Add reference for Lepidoptera and Odonata survey methodology, and explain why no surveying was done during the critical flight periods of July and August.
- 9) Latinized scientific names of all species need to be used. Common English names can be used along with, but not in place of scientific names.

### **Some Data Incomplete, Missing or Incorrect**

- 10) Some sections of this report require further attention:
  - a) Section 3.3.1.1 states that eight plant species of conservation concern were observed, but nine species are listed below that, and 10 species are included in

Table 1.

- b) Appendix A, Vascular Plant List has mistakes, omissions, blanks, and question marks that need to be resolved.
- c) Section 3.4.3, Table 2, Gray Dogwood Mineral Thicket Swamp is S3/S4.

### **Control of Invasive Species**

- 11) During construction, follow the Clean Equipment Protocol of the Ontario Invasive Plant Council,  
[http://www.ontarioinvasiveplants.ca/files/CleanEquipmentProtocol\\_Mar152013\\_D3.pdf](http://www.ontarioinvasiveplants.ca/files/CleanEquipmentProtocol_Mar152013_D3.pdf)

### **Vegetation Community – Gray Dogwood Thicket Swamp**

- 12) p. 18, section 5 environmental impacts, gray dogwood thicket swamp (SWT2-9) is listed as one of the features with potential to be altered or displaced. Since September this is the third time this vegetation type has crossed our path as potential development lands. As SWT, the frequency occurrence within London is less than 8% of all existing vegetation communities. As Gray Dogwood Thicket Swamp (SWT2-9), its frequency is clearly lesser and therefore uncommon in London. This community needs a level of local protection in order to avoid being eliminated before it is even considered officially uncommon.

The recreation of this community as well as the marsh communities are additional reasons why the NE woodland should be expanded north and east to replace the 40% portion to be lost.

The table below presents the frequency occurrence of vegetation communities in London.

**Table 7.** ELC Community Series of Vegetation Communities in the City of London.

Community Series	ELC Code	n	Percent of Vegetation Communities
Deciduous Forest	FOD	954	40.22
Deciduous Swamp	SWD	300	12.65
Cultural Thicket	CUT	252	10.62
Thicket Swamp	SWT	184	7.76
Cultural Meadow	CUM	174	7.34
Meadow Marsh	MAM	133	5.61
Open Aquatic	OAO	91	3.84
Cultural Woodland	CUW	86	3.63
Mixed Forest	FOM	56	2.36
Shallow Marsh	MAS	35	1.48
Coniferous Swamp	SWC	18	0.76
Cultural Savannah	CUS	16	0.67
Mixed Swamp	SWM	15	0.63
Coniferous Forest	FOC	11	0.46
Open Bluff	BLO	10	0.42
Treed Bluff	BLT	10	0.42
Submerged Shallow Aquatic	SAS	5	0.21
Open Tallgrass Prairie	TPO	5	0.21
Floating-Leaved Shallow Aquatic	SAF	4	0.17
Shrub Bog	BOS	3	0.13
Mixed Shallow Aquatic	SAM	3	0.13
Tallgrass Savannah	TPS	3	0.13
Treed Bog	BOT	2	0.08
Open Bog Ecosite	BOO	1	0.04
Tallgrass Woodland	TPW	1	0.04
		<b>2372</b>	<b>100.00</b>

Note: Ecological Land Classification (ELC) Community Series (Lee et al. 1998).

Source: City of London Patch dB (Bergsma and DeYoung 2004)

**FISH AND FISH HABITAT REPORT**

1. pg 11-12 – *Section: Construction-Related Measures-* Stickleback and Carp will be rescued from the existing channel section to be abandoned and relocated to appropriate habitat away from the works.....

NOTE: The Committee applauds the use of qualified fish biologists in advance of construction.

13) RECOMMENDATION: Due to the destructive nature of *Cyprinus carpio* (Common Carp), the committee recommends not to relocate this non-native species of fish to the new channel post-construction. Removal of this non-native fish species would allow the vulnerable *Culaea inconstans* (Brook Stickleback) to take a firm hold and flourish.

2. pg 11 – *Section: Construction-related matters* - perimeter silt fencing will be used (or appropriate alternative)

14) RECOMMENDATION: The Stickleback is a vulnerable fish species thus the committee recommends a double silt fence be used and situated at greater than or equal to 30 m from sensitive areas.

3. pg 12 – *Section: Construction-related matters* -

a) areas disturbed for construction will be returned to its pre-construction conditions

b) silt fencing and temporary stockpiled materials and debris

15) NOTE AND RECOMMENDATION: EEPAC does not support the use of MTO Standard ‘Old Field Mix’ as being appropriate to revegetate along the waterway. Riparian species should be used. Moreover, a seed mix alone is not a sufficient measure to preclude the establishment of weeds and other invasives. Live plants should be used along the waterway in addition to a riparian seed mix. In all cases, the use of native, non-invasive species that is appropriate for the existing habitat in the Crinklaw Drain area should be used.

16) RECOMMENDATION: The committee recommends a map to show the location of the future stockpiles of materials and debris. The committee recommends limiting the number of stockpiles. This would then limit potential damage to the area.

4. pg 11 – *Section: Construction-related matters* – For all in-water works, which the transfer of flow from the old to new channel, a warm water timing window permitting in-water works from **July 1 through to March 15** will be employed

17) NOTE – CORRECTION: Seeing as in-water works are to be completed during a warm water timing window, it is assumed that the above dates are reversed, and that it should read March 15 through to July 1. If the above dates are indeed correct, an explanation is required to clarify how September - March can be included within the warm water window.

/end