

**Medway Valley Heritage Forest (MVHF) (South) ESA Conservation Master Plan (CMP)**  
**March 2018**  
**EEPACs Revised Statement and Recommendations**

***Explanation for Revised Statement***

The original statement submitted to the city from EEPAC was in preparation for the PEC meeting in Feb., 2018, which was cancelled. The original statement was written based on the Oct. 2017 draft CMP. The essence of the two statements from EEPAC is the same, but the revised statement is based on the final CMP and the unexpected Feb. 21, 2018 LAC meeting. Below, three key issues and four recommendations are outlined to explain EEPAC's opposition to the MVHF CMP.

***Statement and Recommendations***

***1. The MHVF CMP violates the council-approved London Plan and the Guidelines for Management Zones and Trails in ESAs, putting at risk the ecological integrity and biodiversity of the ESA.***

EEPAC does not support the MVHF (South) ESA CMP because the CMP is counter to London's current Official Plan and violates the Guidelines for Management Zones and Trails in ESAs (May 2016), hereafter referred to as the Trail Guidelines. The City's current Official Plan states, concerning the use of natural heritage features,

*15.1.1 (v) Maintain, restore, and improve the diversity and connectivity of natural features, and the long-term ecological function with biodiversity of natural heritage systems.*

Based on the City Plan, the Trail Guidelines identify the overarching principle for trail planning and design as:

*Pg. 4 "The basic principle for trail planning and design is to protect the natural features and ecological functions for which the ESA has been identified. The ecological integrity and ecosystem health of the ESA shall have priority in any trail use or design-related decisions."*

The CMP fails to meet many of the trail planning criteria outlined in the Trail Guidelines (Table 1 attached). This (EEPAC's) position is in conflict with the CMP, which indicates that all recommended trail changes meet the Trail Guidelines and protect the ecological integrity and biodiversity of the ESA. This discrepancy results because the CMP is based on a very narrow view of the trail guidelines and a failure to apply the underlying principles to the entire proposed trail system and its collective impacts to the ESA. This issue was initially brought up at the third LAC meeting (see comment 2.13.12, 2.20, 2.21), *but the current CMP continues to use a segment-by-segment process for trail planning and fails to accurately identify potential threats to species at risk and their habitat.*

It can be argued that maintained trails/bridges will keep pedestrian traffic on proper trails, lowering disturbance, **but** only when there is already high traffic volume on non-maintained trails. This is clearly not the case in the Medway, particularly from Fanshawe Park Road south to the Creek due to the wet conditions and the "barrier" of the Creek itself. Increased use and soil disturbance from construction leads to increased potential for disturbance and potential for non-natives to establish.

**Recommendation 1:** We recommend, based on serious risks to the ecological integrity and biodiversity of the MVHF ESA that the council reject the March 2018 CMP. A revised MVHF CMP must consider trail design holistically, rather than look at trails segment-by-segment. Taking this approach will eliminate proposed bridges, and limit trail “upgrades” to wet areas where boardwalks or such will reduce trail widening. It is important that naturalization and trail designs are congruent. This is not the case, for example, for the area between A4 and A1 where a level 3 trail is proposed in tandem with naturalization. Adding a 2-3m asphalt surface that requires installation and maintenance with heavy equipment is at odds with naturalizing an area.

## **2. Acknowledgement of shortcomings with past and present conservation strategies in the MVHF (south) ESA**

Critical to the success of the CMP is the success of timely trail closures. Trails recommended to be closed over two decades ago (see MVHF Site Planning Study, 1996) continue to be used, despite recent (within the last three years) City efforts to close them. The present CMP does not: 1) acknowledge that efforts to close trails are failing; 2) consider possible reasons for this, or 3) suggest changes to mitigate these problems and ensure successful trail closure in the future. Similarly, efforts to stop dogs-off-leash and bicycles in the ESA, by-laws to protect species at risk, continue to fail. The CMP notes that increased development in the area will bring more people into the ESA; acknowledgement of existing shortcomings with current strategies is imperative for finding better ways forward to protect this ESA.

**Recommendation 2:** A revised CMP must identify new strategies to close trails and enforce by-laws. The CMP does not include a comprehensive assessment of previous literature to provide insights for new strategies. If knowledge gaps exist in the literature, the city should use carefully planned research to determine best steps to move forward and improve the present situation. In terms of trail closure and enforcement business-as-usual is not acceptable. This requires a clear implementation schedule and budget prior to adoption of the CMP.

## **3. Monitoring lacks essential planning and reporting details**

For the CMP to successfully protect the ecological integrity and biodiversity of the MVHF, it is critical that restoration and monitoring plans are timely and scientifically rigorous. As an example of previous restoration and monitoring efforts, the CMP highlights restoration efforts to eradicate Goutweed (*Aegopodium podagraria*) to protect False Rue-Anemone (*Enemion biternatum*). Although such efforts should be continued and applauded, monitoring of these and other restoration efforts, including trails, must be timely and scientifically sound. Bowles (1986; 1989) and Austen (1990; 1991) reported populations of False Rue-anemone along Medway Creek. Austen also described potential threats to these populations including proximity to trails and goutweed, and notes “The presence of certain populations on conservation property may prevent development that may be destructive to *Isopyrum biternatum* (*Enemion biternatum*) populations; however, public access into these areas also poses a threat to this species” (Austen, 1990; pg. 21). Nearly two decades after these publications the city took action to protect the False Rue-anemone (Dillon 2014). Photographs (Dillon 2015, 2016, 2018) seem to indicate a reduction in goutweed; however, the effects of restoration on False Rue-anemone are

uncertain because acceptable limits and targeted outcomes, as well as measurements to determine these, were not clearly described before the action. Assuming recent population estimates are accurate (provided in Dillon, 2018), three of the ten colonies included in the restoration have all but disappeared, three have increased in population and four populations have remained unchanged. Is this a success? Although much progress has been made to protect the species at risk in MVHF (south), continued efforts, including carefully planned monitoring strategies, will require funding.

**Recommendation 3:** We recommend that Council continue restoration and naturalization efforts and provide sufficient budgets for doing so. This requires more detailed and scientifically rigorous plans for “gauging the success of management interventions in keeping conditions within acceptable limits and within the targeted outcome” (CMP, pg. 51; Trail Guidelines, pg. 9). The CMP does not do this. For example, in Table 12 of the CMP the monitoring described to track trail usage at bridge A will be done using a counter between A10 and A12 to collect baseline and ongoing trail data. This will be done annually, and will be compared to abiotic or biotic impacts near linkage A to determine whether linkage A has had an impact. This monitoring plan is seriously lacking and does not address any of the concerns raised by EEPAC regarding the bridge proposed at site A. EEPAC has repeatedly indicated that adding a bridge will increase traffic in the area of the loop trail that encircles False Rue-anemone and habitat for Cream Violet and American Gromwell. How will a single counter between A10 and A12 track traffic from linkage A? Won't it also include traffic entering at A10 and A12? EEPAC is concerned about abiotic and biotic conditions near the bridge, but also near the trail loop. EEPAC expects an increase of trail usage on the loop trail as a result of bridge A. How will measuring abiotic and biotic impacts near bridge A show this? How will impacts to the abiotic factors and biota, at any location, be measured? What level of measurement will indicate an impact? What will be done to mitigate the situation should an impact be measured? In the future, all monitoring reports on trail projects and restoration efforts should be readily available to the public. In summary, a more detailed monitoring plan is required with budget implications prior to adoption of the Plan.

**Final Recommendations:** We recommend that the council encourage staff to rethink and revise the MVHF CMP. EEPAC cannot endorse any CMP that includes bridge crossings or fails to minimize trail “upgrades” (i.e., hardening), which will increase risks to species at risk and their habitat (Table 1). Trail design must also consider the Accessibility for Ontarians with Disabilities Act (AODA); EEPAC believes it is possible to both improve access while maintaining long-term ecological integrity of the MHVF ESA, but this has not been achieved in the current CMP. The MVHF is a small, but unique and incredibly diverse environment that has been, to date, preserved within an urban center. We remind council that only 1.6% of the city of London's area has been set aside as ESA to protect the natural ecosystem of this region. The protection of these remnants must be the priority of any CMP. The onus is on the City to show, with little to no doubt, that their plan will protect the ecological integrity of the ESA; they have failed to do this. The stakes are high; extinction of species and the loss of the last remaining natural environments in London are real possibilities.

## References

Austen, M.J.W. 1990. Status Report on the False Rue-Anemone (*Isopyrum biternatum*) in Canada. Committee on the Status of Endangered Wildlife, Ottawa, Ontario.

Austen, M.J.W. 1991. Status of False Rue-anemone, *Isopyrum biternatum* (Ranunculaceae) in Canada, *The Canadian Field Naturalist* 105, 512-516.

Bowles, J.M. 1986. Preliminary Life Science Inventory of the Parts of The Medway Creek Valley and Snake Creek Valley known as Dead Horse Canyon and Fox Hollow. Sponsored by the McIlwraith Field Naturalist of London, London, Ontario. 45pp.

Bowles, J.M. 1989. A Life Science Inventory of the Lower Medway River Valley in London, Ontario: Part II – Inventory Report. Upper Thames Conservation Authority and London Public Utilities Commission. 82pp and appendices.

Dillon Consulting Limited. 2014. Invasive Species Control Program Results: Medway Valley Heritage Forest (South) ESA. 13 pp and appendices.

Dillon Consulting Limited. 2015. Invasive Species Control Program Results: Medway Valley Heritage Forest (South) ESA. 18 pp and appendices.

Dillon Consulting Limited. 2016. Invasive Species Control Program Results: Medway Valley Heritage Forest (South) ESA. 23 pp and appendices.

Dillon Consulting Limited. 2018. Invasive Species Control Program Results: Medway Valley Heritage Forest (South) ESA. 26 pp and appendices.

TABLE 1: Evidence that MVHF CMP violates the trail guidelines.

Trail Guidelines Indicate that CMPs should....	The MVHF CMP meets/does not meet the criteria
<p>Pg. 10 and 11 areas that contain unique and rare examples of botanical, zoological or geological phenomena should be avoided.</p>	<p>DOES NOT MEET – ADDITION OF BRIDGES AND HARDENING OF TRAILS WILL INCREASE ACCESS TO AREAS WITH SPECIES AT RISK AND THEIR HABITATS</p> <ul style="list-style-type: none"> <li>*many of the trails have existed for years and were not part of a formal planning process, therefore, trails are not always located to protect species and habitat</li> <li>*some trails (e.g., the loop between A10 and A11 that includes False Rue-anemone, habitat for Cream Violet, and American Gromwell) are in close proximity to species at risk and sometimes cross their habitat; this risk was identified nearly thirty years ago (Austen, 1990, 1991)</li> <li>* the CMP (pg. 36) and the Addendum (Dillon, 2016) indicate that existing managed trails were determined to be compatible with significant ecological features in the MVHF ESA (south); no existing managed trails would be recommended for closure or relocation; however, this fails to consider plans to upgrade trails between A5 and A10 and construction of a bridge at A, which will increase traffic to this loop</li> <li>*if A5 to A10 is hardened and a bridge added, increased traffic will increase threats to species at risk and their habitat and the loop between A10 and A11 should be closed (EEPAC notes previous trail closures have not been timely or successful; for example, closing trails at the end of the loop (near B on CMP figure 4) has finally taken place, 21 years after it was initially recommended)</li> <li>*alternatively A5 to A10 should not be hardened and the bridge should not be added</li> <li>*aquatic species of risk are not included in the CMP, but as noted in the alternate report submitted by some members of LAC, fish and mussel species at risk and their habitat are found at bridge sites; adding bridges poses risks to these species and brings trails in closer proximity to these species</li> </ul>
<p>Pg. 5 minimize the number and magnitude of trails within an ESA</p>	<p>DOES NOT MEET – INCREASES NUMBERS OF TRAILS AND TRAIL WIDTHS</p> <ul style="list-style-type: none"> <li>*The current CMP does not close off any additional trails from the 11km of trails proposed for closure in 1996; much of this 11km continues to be used two decades later</li> <li>*New trails are proposed between A4 and A1, a small section at A10, a new trail to replace the temporarily closed trail between A24 and A20 and two new “trail connections” (i.e., bridges) adding approximately 1 km of new trails</li> <li>*The CMP proposes to change several trails from level 1 to 2, widening many trails and thus increasing the magnitude of trails</li> </ul>
<p>Pg. 28 limit access points</p>	<p>DOES NOT MEET – MAINTAINS NUMBERS OF ACCESS POINTS</p> <ul style="list-style-type: none"> <li>*the 1996 CMP resulted in the successful closure of two access points; one at Fanshawe on</li> </ul>

TABLE 1: Evidence that MVHF CMP violates the trail guidelines.

	<p>the east side of Medway and one at Bloomfield</p> <p>*there are presently 16 access points to the MVHF (south); none are proposed to be closed (the two leading to university property have been changed to “future access points”)</p> <p>*numerous access points makes it difficult to enforce by-laws and protect the ESA</p>
<p>Pg. 7 size and number of structures will be minimized</p> <p>Pg. 26 structures (e.g., boardwalks, bridges, stairways) may be permitted to reduce impacts to significant ecological features and increase the sustainability of the trail system in the ESA</p> <p>Pg. 35 the use of trail structures will be minimized and used to either provide a higher level of protection to a significant ecological feature</p>	<p>DOES NOT MEET – INCREASES THE NUMBER OF STRUCTURES BEYOND WHAT IS NECESSARY TO PROTECT</p> <p>*adds two bridges, a stepping stone crossing and improves trail surfaces between A12 and B and A11 and C – some of these should be made, most should not</p> <p>* as noted above and below, the addition of bridges at A and D increase traffic to ecologically sensitive areas; this increases the risk of impacts to species at risk and their habitat</p> <p>*if the proposed new trail between Gainsborough and Snake Creek is added, it seems likely stairs will be necessary to prevent erosion on the steep slopes adjacent to Gainsborough, adding more structures</p> <p>*the proposed trail between Gainsborough and Snake Creek runs adjacent to a temporarily closed trail; the original trail resulted in severe erosion along steep banks; what will keep people from accessing the old closed trail from the new trail? The old trail provides a view of the creek and in some places is located only meters away from the new trail. Continued access will only increase erosion that is already severe</p> <p>*the stepping stone crossing at Snake Creek is a good idea as it will help reduce erosion that is presently in evidence</p> <p>*adding boardwalks where improved trail surfaces are indicated in yellow on Figure 4 of the CMP are encouraged as trail widening is occurring at these locations due to wetness, especially in spring</p>
<p>Pg. 7 the use of pedestrian bridges should be for the purpose of protecting ecological features and functions</p> <p>Pg. 26 structures (e.g., boardwalks, bridges, stairways) may be permitted to reduce impacts to significant ecological features and increase the sustainability of the trail system in the ESA</p>	<p>DOES NOT MEET – ADDITION OF BRIDGES WILL INCREASE ACCESS TO ECOLOGICALLY SENSITIVE AREAS AND INCREASE RISKS TO SPCIES AT RISK AND THEIR HABITAT</p> <p>*the CMP suggests that people cross Medway Creek at low water and when ice is on the creek; this is unlikely because even at low water you will get wet feet and during the winter fast moving water makes open water likely; personal observations of winter ice indicates only small animals get across on ice</p> <p>*CMP suggests that bridges will help reduce bank erosion occurring from people crossing; there is little evidence of bank erosion and crossings are unlikely (see above)</p> <p>*addition of any bridges will increase access, both by biker and hikers, to species at risk</p>