

Thames Valley Parkway North Branch Connection, Class EA Environmental Impact Study, Richmond to Adelaide Street

Public Redacted Version, dated February 2016 by Dillon Consulting

Reviewers: E. Arellano C. Dyck, S. Levin, S. Madhavji, Prof. K. Moser,
S. Peirce, March 15, 2016, revised May 2016

OVERVIEW

EEPAC's first report on this matter was submitted with the minutes of EEPAC's March, 2016 meeting, along with a request to make a presentation to the Planning and Environment Committee of Council. After EEPAC's submission, and prior to its presentation to PEC, EEPAC was invited to meet with City staff and the consultant, which provided an opportunity for a good discussion on EEPAC's original comments. EEPAC appreciates the opportunities for this discussion. These discussions were first with the staff and EEPAC's chair on March 24, 2016 and then with the entire working group on April 13, 2016.

EEPAC would welcome the opportunity to review enhancement options. At the April 13th meeting, the working group was given to understand that the consultant would prepare ideas for consideration given their greater knowledge of the site, and which sites are actually available for enhancement as most of the pathway is through private lands. Having been asked for ideas, but not having a clear picture of where, the soil conditions and so on, it is difficult for EEPAC to offer meaningful input. We are encouraged to hear at least one of the private property owners may be cooperative in allowing enhancement projects on its lands.

Despite helpful discussions, EEPAC continues to have concerns regarding the Thames Valley Parkway North branch connection, and continues to recommend that the city pursue alternative routes given the SARs in close proximity to the proposed pathway and concerns raised by UTCRA staff. In fact, we recommend that this area be considered for an ESA designation given EEPAC's opinion that the Study Area meets at least two of the seven criteria for designation under the City's Official Plan. Our main concerns regarding this connection are: 1) that the public consultation process used to choose the alternative was flawed; 2) that there are species at risk (SARs); 3) data requirements were not complete; 4) concerns raised by the UTRCA; 5) the Broughdale connection, and 6) the net effects assessment.

As per Council Policy (OP 15.3.3), EEPAC prefers infrastructure outside the Natural Heritage System. However, in case the city goes ahead with the proposal, despite our recommendations, we also provide recommendations for 1) the pre-construction phase; 2) the construction phase, and 3) the post construction phase. EEPAC feels strongly that it is longer-term impacts that are the greatest threat to the surprisingly sensitive ecological features and environmental functions of this area. It is post construction that is generally less well covered in an EA and less well followed after the project is in place. This is critical to the final EA report as is a statement by the city and consultants that despite best efforts, there is no way to guarantee that SARs in the area will not be impacted in the long term.

Although EEPAC is not satisfied that this is the best alternative, if the city opts to go ahead, EEPAC has provided many recommendations under themes 7 and 8.

EEPAC would like to point out that it was not given the Draft EA to review, only the draft EIS and the previously completed Subject Lands Study Report.

THEME #1 – Additional data collection requirements

According to “How do you avoid costly project delays? Just Ask Golder,” a reference card published by this consulting firm, the best time to do snake surveys is April to May. The cover boards were placed early in May, however, it appears the main checks were done in June.

As well, from the Appendix, “Details of Site Visits” it appears no fall surveys were done for plants or for migratory birds. (Environmental Management Guideline -Inventory Protocol). This is a major concern given the location and that a paved path will attract snakes to bask.

1. **RECOMMENDATION:** The snake and fall vegetation and migratory bird surveys be conducted before the EIS is considered complete.
2. **RECOMMENDATION:** Snake overwintering sites should be identified before construction and screened off so that there is no disruption during construction. This should be done as part of the EIS/EA, but no later than detail design.

Theme #2 - SPECIES AT RISK (SAR)

There are apparently many species at risk in the study area, although the exact number was difficult to discern, as sections of the EIS, the Appendices, and Maps have been redacted.

The TVP is not a one-time disturbance; creation of the pathway will leave a permanent mark on the area and will lead to a continuous threat of incursion by humans and/or their pets as occurs on a regular basis in the nearby Killaly Meadows ESA. Assuming that at least some of the SAR are mobile, it is logical to assume that the presence of the

species will quickly become public knowledge which could lead to even greater levels of risk of harm to the species and/or their habitat, contrary to Provincial and Federal Legislation.

EEPAC is most concerned with activities incompatible with SAR and their habitat post construction, even if the construction project does not have negative impacts on environmental features and ecological functions.

Several times the EIS says that the preferred alternative will avoid areas “heavily used” by SAR – but what exactly is meant by “heavily used”? (e.g., pg. 28). To adequately protect SARs it would be better to avoid all areas even moderately used.

There is no way to guarantee that species of risk in this area or close proximity will be unharmed as a result of this connection.

3. **RECOMMENDATION:** All and any areas used by SAR as well as their habitat should be avoided. It is not clear given the range of some species how this can be achieved over the long term.
4. **RECOMMENDATION:** Council receive confirmation from the MNR that no permitting is required under Endangered Species Act.
5. **RECOMMENDATION:** The city and consultants need to clearly state in the ESR that there is a possibility that SAR or their habitat could be harmed or impacted in the long term.

If it is Council’s decision to proceed with the preferred option, EEPAC is particularly concerned with the increase of human and dog “traffic” where sensitive habitat is located.

The resources of that unique stretch of land cannot be said to be used sustainably if it means increased harassment of species by domestic dogs (on a field visit to public lands, dogs off leash were seen at both proposed bridge locations) and potential removal of native species by visitors. Clearly the project will bring more people into an area which previously has had limited access and awareness as it is private property with only one small subdivision abutting it.

If the plan goes ahead, despite the issues we have raised, then we recommend the following:

6. **RECOMMENDATION:** a specific screening and deterrence plan be prepared for SAR habitats. The work should consist of both native, non-invasive plant species and physical barriers as approved by the Species at Risk Biologist at the UTRCA.

7. **RECOMMENDATION:** the project provide a place within the study area away from sensitive areas where people can “engage” with the River. The concern is the ongoing unlicensed fishing that has had detrimental impacts on species (such as lost fishing hooks consumed by wildlife and wildlife tangled in fishing line). It is suggested that a specific location will minimize such activities in more sensitive areas.
8. **RECOMMENDATION:**
 - a. The bridge approach must have a railing or other physical structure as well as plantings of thorny non fruit bearing native species to encourage users to stay on the managed path.
 - b. In sensitive areas or to cut off informal trails, exclusionary fencing should be used.
 - c. Bridge treatments that would minimize disturbance of species by humans must be included in the project bid documents and implemented.
 - d. Strongly recommend that the bridge option discussed on April 13th that would provide for a longer “ramp up” to the bridge and eliminate the earth fill ramp at Ross Park be used.

In its first draft, EEPAC pointed out there is a recovery strategy for one of the SAR plant species found in the study area. As a result, we reiterate the following.

9. **RECOMMENDATION:** The City follow the restoration plan for REDACTED as set out by the Province which is, as follows.

Other conditions designed to minimize adverse effects included, but are not limited to:

Transplanting to suitable habitat on site to protect them from adverse effects;

Additional plantings; and

Ensuring no soil disturbance within 20 metres

Minimizing adverse effects (e.g., measures to minimize disturbance to trees and herbaceous plants such as identifying and marking individuals, establishing a buffer area and avoiding compaction of soil);

Monitoring, collecting and maintaining information on the species and the mitigation measures taken; and

Submitting an annual report summarizing the results and the effectiveness of the work.

Further information regarding ‘overall benefits permits’ is available through Ontario’s Environmental Registry.

THEME #3 – PUBLIC PROCESS AND ENGAGEMENT

EEPAC remains concerned that due to the unexpected sensitivity of the site, full engagement of the public and the landowners was not possible. This is based on EEPAC members attending the Public Information Centres conducted during the EA. Negative impacts should be avoided, and in this instance, EEPAC feels that the alternatives have not been given their due weight. In addition, when questioned at public meetings, citizens made clear that they would like the new link but only if it would not cause environmental damage. Protecting the environment was ranked as the topic priority for the 140 people who attended the first PIC in January, 2015. It can be assumed that if there were greater disclosure of the ecological impacts, a section of the attendees would not approve the current preferred routing for the TVP. While city decisions do not always agree with the public’s opinion on a project, EEPAC feels the required balance between what could be shared with the public and the EA process resulted in a less than fully informed public. EEPAC also was not provided with an opportunity to comment on the draft EA which made it difficult for us to review the options studied and how they were ranked in the EA.

A member of EEPAC who attended the public open houses has this to say:

The process for determining an alternative pathway involved two public meetings. At the second meeting panels were presented that showed that following meeting 1, people had identified that the most important criterion for selecting a route was protecting the environment, and that the preferred route was A. However, in reviewing the panels at meeting 1 most SARs were not reported at this public meeting. I understand not wanting to identify specific species or their locations, but in order that people have sufficient information to evaluate the alternate routes, the number and status of SARS should have been provided. Prior to attending the EIS scoping meeting, I was keen on alternate A, although still wondering if alternate E might be better for the environment. Upon learning just how special this area is, I changed my mind completely about wanting to support alternative A. The public was not privy to this information, so could not make a truly informed decision. Given people identified the environment as most important I expect others might feel like I do.

Furthermore, a chart at the public meeting indicated that alternate A had “comparatively positive effects on the environment”. As we show in *Theme 6: The Net Effects Assessment* (see below), this is very subjective.

Theme #4 - PROPOSED BROUGHDALE CONNECTION BY BROUGHDALE DYKE

10. **RECOMMENDATION:** The “draft” Broughdale connection be deleted from the EIS as no work will be done until the UTRCA does work on the Broughdale Dyke.
11. **RECOMMENDATION:** The detailed natural heritage inventory be forwarded to the UTRCA particularly as it relates to this section of the study area.
12. **RECOMMENDATION:** The UTRCA conduct an EA and EIS for the Dyke project.

EEPAC’s rationale is as follows:

a. There is a small community shown on Figure 3A – Vegetation Communities under ELC ‘SA.’ Shallow Aquatic communities are some of the rarest communities in London according to the Regionally Significant Vegetation Communities table prepared by Bergsma and DeYoung in 2006.

Duggan in the SLSR (p. 35-36), in discussing all the wetland communities, indicated “Special consideration must be given to avoiding impacts to these communities and the species that are present.”

b. EEPAC believes there has been an incorrect application of the Provincial Significant Wildlife Habitat Ecoregional Criteria Schedules for Ecoregion 7E (2015), specific to the section – Amphibian Breeding Habitat (Woodlands) as shown in Appendix 14 of the SLSR by Duggan. EEPAC has shared this concern with staff and the Consultant. It appears at this time to EEPAC that an older version of the schedules was used.

Theme #5 - UTRCA COMMENTS (Appendix 5, draft EIS, partially redacted)

Letter from UTRCA to Ms. Stanlake-Wong

- *‘much of the study area is located within flooding and erosion hazard areas’*
- *‘the City of London should not develop new sections of pathway which are highly prone to flooding and erosion’*
- *‘Any pathway should be kept a minimum 50m from the water’s edge to help maintain the recommended Riparian buffer. Alternatively, keep the trail 30m, from the edge of the riparian vegetation’*

13. **RECOMMENDATION:** EEPAC supports the UTRCA comments it was able to see, noting the Athletic Fields regularly floods early in the calendar year in years with normal snow pack.

Theme #6 - NET EFFECTS TABLE (Table 6 on page 35-37 of the EIS)

EEPAC strongly disagrees with many of the conclusions in Table 6. Our position is that this project will result in Medium Net Effects.

CONSTRUCTION

- *Construction related to run off sedimentation* – there is no conceivable way to put a crane in a river without having any erosion or changes in sediment inputs; if sediment inputs increase for some unforeseen reason how will it be dealt with?
- Even short-term increases in sediment inputs could potentially harm SARs as well as other organisms. Low water levels will concentrate sediment inputs and potentially increase risk to aquatic organisms.

Disturbance to Fish and Fish Habitat – How will riffles be avoided? There are riffles at the proposed eastern bridge location. This will have a negative effect on aquatic life.

14. **RECOMMENDATION:** Either don't put a bridge in this location or do not do in river construction work.

- *Soil compaction*
 - o Incomplete information about: De-compaction methods?
 - o Have you factored in soil filling/recycling and activation of seed banks that include invasive species?
 - Invasive species seed banks have high germination rates after disturbance occurs, as well as low seedling mortality (see invasive removal section)

Argue **Medium Net Effect**

POTENTIAL LONG TERM IMPACTS

Disturbance to sensitive wildlife

- Proportion of redacted pages in EIS indicates the presence of significant wildlife habitat
 - Organisms will still be affected by the presence of human and pet-related disturbances
 - Signage to encourage TVP users to stay on the pathway does not work – the number of trails that lead down to the river along existing parts of the TVP (e.g. Killaly) are indicative of this. While it might be said anecdotally that 90% of people stay on paths, when you increase the number of users from 100 to 1000, the number of people in the 10% that don't stay on paths increases from 10 to 100, a tenfold increase.
 - Reptiles - The eggs at the top of a nest may be covered by only a few centimeters of sand and gravel. Many nests in high-people-traffic areas get stepped on unknowingly, and many eggs can be dinged, damaged or completely crushed. This makes the nest even more vulnerable to predation by mammals because the eggs can start to rot, which can then attract scavengers. From an EEPAC member: *I have observed turtles laying eggs on the northern edge of the sports fields. Turtles had to cross the bike path to get to this site. A day after I saw the turtle lay its eggs, I returned and found they had been dug up. It could have been by humans, dogs or other predators. I also observed an injured turtle on the soccer fields. How will adding a pathway provide better protection for these animals?*
 - Reptiles bask on pavement and are subject to being run over by bikes or maintenance vehicles either by accident or deliberately (as was found at Long Point –Ashley, E. Paul, Kosloski, Amanda and Petrie, Scott A. (2007) 'Incidence of Intentional Vehicle-Reptile Collisions', Human Dimensions of Wildlife, 12:3, 137 – 143. URL: <http://dx.doi.org/10.1080/10871200701322423>)
 - Argue **Medium Net Effect**
- *Decreased invasive species*
- Length of monitoring for establishment of native flora takes multiple years and requires active removal of re-emerging invasive seedlings
 - Increased presence of people leads to increased presence of pets (dogs)
 - Will the removal of established flora be only subjected to areas near the trail system?
 - This is not a positive effect – removal of invasives could occur without building the TVP extension, so how can it be argued that adding the TVP reduces invasive species? In fact, bringing in construction equipment potentially increases invasive species.
 - Argue **Low Net Effect NOT No Net Effect**

- *Increased litter*
 - Affected areas will include unmanaged side trails within the entire region; not just along TVP unless such trails are scoured and interrupted
 - Management of waste receptacles requires the use of carts/cars – source of movement of invasive species, disturbance to wildlife, attraction to waste receptacles by scavenging fauna (squirrels) and predators (raccoons)
 - **Use of wildlife-proof garbage receptacles would be required**
 - Incomplete information about: Garbage cans presently located in the soccer fields are only there in summer. Is this the plan for the new section of TVP? How will garbage cans be accessed? By truck? Litter is very high along the present TVP in this area. Presumably there is a waste diversion system in place there now? By introducing litter containers, you introduce an attractor of a greater population of racoons, a natural predator. In addition, increased litter containers may require vehicle access on the path to collect garbage increasing the risk to SAR
 - Full compliance with no littering rules is not feasible
 - therefore **Low Net Effect not No Net Effect**

- Potential Off-leash dog use
 - Off-leash dogs disturb nesting areas and damage sensitive wildlife habitat
 - Dogs urinating in nesting and sensitive wildlife habitats "marks" the territory, which makes it undesirable or uninhabitable to the wildlife living there
 - Leads to run-off and changes in water quality
 - Dog fur/paws pick up seeds, which can spread invasive plant species
 - Unleashed dogs can injure (or even kill) wildlife
 - Proper pet waste disposal does not occur in the winter – evidenced by the amount of excrement that appears after the snow melts
 - Enforcement policy is not consistent nor adequate enough to monitor the length of TVP, let alone the collective extent of unmarked side trails. For example, it is unlikely the City will have an Animal Control Officer on site during all day light hours to enforce the dog off leash by law which is routinely ignored in Ross Park, the Athletic Fields and in ESAs which are managed by the UTRCA under contract to the City.
 - Full compliance with on-leash dog rule is not feasible – argue **Medium Net Effect**

Theme #7 - If the project is approved, EEPAC has the following recommendations for project requirements

Duggan (p.36, SLSR) recommended the following. EEPAC concurs:

15. **RECOMMENDATIONS:** for the protection of Significant Woodlands include:
- Ensuring that hydrological functions of the wooded lands are not disturbed
 - Not reducing the amount of natural cover present such that it reduces the patch contribution to 10% within 2km of the study lands; avoid increasing the perimeter to area ratio of the entire patch.
 - Ensure existing connectivity to other natural areas along the Thames River are maintained; enhance connectivity where appropriate/feasible
 - Avoid disturbance to trees that make up the mature structure of the floodplain forest (in particular, avoid disturbance to large diameter trees)
 - Avoid habitat components that include amphibian breeding areas, rare wetland plant assemblages, and during the core of breeding bird season (late April – mid July)
 - Avoid disturbance and/or plan for restoring lands within the forest community type (FOD7-4); compensate and/or enhance the understory vegetation communities associated with this community type where the understory and ground layers may be disturbed and dominated by non-indigenous plant species
 - Avoid disturbance and impacts to endangered and threatened SAR and their habitat.

EEPAC recommends that Council require the following as per the City’s Official Plan Section 15.3.3.iii.a as highlighted below. At the April 13, 2016 meeting with the Working Group, City Staff requested the consultant prepare possible ideas for EEPAC to review. EEPAC would be pleased to do so when it is clear where the enhancements could take place (City lands or with a collaborating land owner). EEPAC has already provided to staff and the consultant in its previous draft the Provincial recovery strategy for one of the SAR.

15.3.3.iii

iii) As a condition of approving infrastructure projects within the Natural Heritage System, the City shall require specific mitigation and compensatory mitigation measures that are identified in the accepted environmental impact study to address impacts to natural features and functions caused by the construction or maintenance of the infrastructure.

For the purposes of this Plan, mitigation shall mean the replacement of the natural heritage feature removed or disturbed on a one-for-one land area

basis. Compensatory mitigation shall mean additional measures required to address impacts on the functions of the natural heritage system affected by the proposed works. The extent of the compensation required shall be identified in the environmental impact study, and shall be relative to both the degree of the proposed disturbance, and the component(s) of the natural heritage system removed and/or disturbed.

Compensatory mitigation may be provided in forms such as, but not limited to:

- a) **additional rehabilitation and/or remediation beyond the area directly affected by the proposed works;***
- b) off-site works to restore, replace or enhance the ecological functions affected by the proposed works; and,*
- c) replacement ratios greater than the one-for-one land area required to mitigate the impacts of the proposed works.”*

PRE-CONSTRUCTION

- 16. **RECOMMENDATION:** Training requirements in the identification and protection of Species at Risk for all contractor staff be included in the bid documents. The training requirements should be reviewed by a qualified species at risk biologist before being included in the bid documents. It is important that the training be provided by a qualified person approved by a City Ecologist or the UTRCA Species at Risk biologist.

- 17. **RECOMMENDATION:** The Environmental Management Plan be detailed and before acceptance, reviewed by EEPAC and the UTRCA Species at Risk biologist and require the approval of a City Ecologist.

- 18. **RECOMMENDATION:** Herpetofauna nesting and overwintering sites be identified prior to construction and protection measures put in place to the satisfaction of a species at risk biologist.

- 19. **RECOMMENDATION:** The proposed natural fences be made up of non-fruit bearing thorny plants to reduce the likelihood of humans or predator species being attracted to the screening vegetation.

20. **RECOMMENDATION:** The screening vegetation be planted as early in the process in possible to increase the effectiveness of the screening prior to the opening of the pathway.

The EIS recommends on page 33 additional design measures for the western bridge that are visual barriers between the bridge and what is a redacted section (we assume it is a SAR). We agree.

21. **RECOMMENDATION:** Treatments on the Western bridge and the section of the TVP in Ross Park adjacent to the River should be included in the construction documents.
22. **RECOMMENDATION:** The UTRCA and a City Ecologist review the construction plans prior to commencement of work (during detailed design and the subsequent design phase) and their recommendations for changes be given priority.

IMPLEMENTATION AND MONITORING OF THE PROPOSED COMPENSATION PLAN AND INVASIVE SPECIES MANAGEMENT PLANS

Monitoring will be very important. The results from a previous city infrastructure project (Medway Sewer) were mixed. Mr. Soldo and Mr. Copeland were shown where soil had run off each end of the first bridges built. There was no vegetation and no soil left for any plantings. The original restoration plan incorrectly called for prairie species rather than floodplain species.

There must be, as proposed in the Executive Summary, a compensation / enhancement Plan and Invasive Species Management Plan developed during the Detailed Design stage and implemented during operation. Monitoring for establishment of native flora takes multiple years and requires active removal of re-emerging invasive seedlings on an on-going basis.

23. **RECOMMENDATION:**

The Compensation Plan and Invasive Species Management Plans from the project bidders must be reviewed by EEPAC and a City Ecologist before a contract is awarded. High weighting should be given to the quality of the Plans and the monitoring in determining the winning bid. A City Ecologist's approval be required before either Plan is implemented.

24. **RECOMMENDATION:** Additional funding or a reallocation of funding is required to continue the invasive species management program after the project funding is exhausted.

IN WATER WORKS (IF, and ONLY IF, REQUIRED)

EEPAC strongly recommend no in water work for bridge components. It appears this can be implemented with the cooperation of a landowner. The City should find a way to gain the cooperation as a water pipeline already is located in this area and needs work and would provide the best means to avoid in water work on the East bridge.

More detail is needed when describing the actual measures that will be taken to reduce erosion and control sediment. There is concern about construction related run-off sedimentation. Perhaps there needs to be monitoring before and after construction?

In its submission included in the EIS, UTRCA cautions regarding flooding and the fluvial nature of the River in the area is still changing.

Bridge piers in the water can lead to local scour holes and can act as a barrier to floating debris in the water. By not considering high flows and not providing the actual locations of the bridge piers, there is a gap in the report. The EIS indicates that a temporary bridge (east) may be built which will require two piers in the water. This may have effects on flow, benthic invertebrates, fish habitat and cause changes to the sediment substrate.

There are significant challenges in bringing in construction equipment to the site (p. 2-3 EIS). A laydown area and possibly a laydown area in the River in the area of the Eastern bridge in particular are suggested. The Eastern bridge construction may also require a temporary bridge with two piers in the water. Given the sensitivity of the area (floodway) and the proposed compensation measures, there are challenges in trying to restore the areas damaged. Cobble and gravel are the most common substrate for Ontario fishes. Additionally, many fish prefer to mate in shallow water less than 1 meter in depth. While it is unclear if any species spawn in the areas proposed for bridge construction some of the common fish would use the riffle habitat. July 16th is outside of the darter spawning season but not outside of the season for other native fish species. Longnose gar spawns in early July and most sunfish in early to mid-summer. Therefore, caution should be taken.

If in water work has to be done:

25. **RECOMMENDATION:** The proposed erosion and sediment control measures should be clearly stated and reviewed by a qualified inspector.
26. **RECOMMENDATION:** Do construction in the winter to reduce impacts on environmental features and ecological functions as well on species and their habitats. We understand from the consultants that the cost benefit of this approach may be favourable.
27. **RECOMMENDATION:** Any in river works must be outside fish spawning season as per Department of Fisheries and Oceans requirements and as recommended by a specialist in fresh water aquatic species.
28. **RECOMMENDATION:**
- a. if the in-water construction is done, sediment quality be preserved as well, water levels and quality need to be maintained upstream and downstream of the construction.
 - b. water levels and quality need to be maintained for fish and benthic habitats both upstream and downstream of the in-water works. Once the works are completed, the construction site must be restored to pre-construction sediment and water quality standards.
29. **RECOMMENDATION:** A detailed survey of these reaches of the river be done by a qualified reviewer of aquatic habitats to determine if any fish or mussel species of concern are there, and the required avoidance and mitigation measures take place if in river work is done.
30. **RECOMMENDATION:** A qualified reviewer should be retained to determine the risk of flood damage for any temporary piers prior to project approval.

CONSTRUCTION

31. **RECOMMENDATION:** In consultation with the Species at Risk Biologist at the UTRCA, determine if open box culverts below the pathway on the Scouts property are needed.

32. **RECOMMENDATION:** The Clean Equipment Protocol for Industry: Inspecting and cleaning equipment for the purposes of invasive species prevention should be followed. The City should consult the Ontario Invasive Plant Council for advice in how best to include these requirements in the bid documents and how to implement them in the project.
33. **RECOMMENDATION:** If any fill is required, consideration should be given to clean fill versus using the fill on site. This is to avoid reintroducing the seed bank which likely contains a high percentage of invasive species given the condition of the understory according to the EIS. This must be part of the construction contract.
34. **RECOMMENDATION:** As per page 29 of the EIS, no tree cutting or disturbance take place between April and October 15th.
35. **RECOMMENDATION:** A tree cavity search (p.29-30) take place prior to any tree cutting or disturbance to determine if nesting bird or bat habitat will be disturbed. There are recognized experts at Western University who should be consulted if bats are found to determine if they are also species at risk. Trees identified as maternity roosting habitat must be protected as three endangered species of bats are known to be in the London area and they and their habitat are automatically protected under Provincial legislation.
36. **RECOMMENDATION:** A qualified biologist (preferably a Species at Risk Biologist from the UTRCA) should be on site at all times during construction. This biologist must have the authority to stop work if required to avoid harm to species at risk or their habitats.
37. **RECOMMENDATION:** Work with property owners too so that all unmanaged trailed are scoured or otherwise made unattractive to visitors (including fencing if necessary) to encourage them to stick to the paved path.
38. **RECOMMENDATION:** The creation of the path must minimize removal of black walnut trees.
39. **RECOMMENDATION:** Equipment should be kept at least 30 m from the river, from wetlands, and SAR habitat, particularly when re-fueling.

POST-CONSTRUCTION

No mention is made of winter maintenance in the EIS. This issue must be clearly addressed before proceeding with the project. If there will be winter maintenance on the bridges, this needs to be considered in bridge design. Using salt could have serious negative impacts on water quality and aquatic species. Sand can add sediment.

40. RECOMMENDATION: Given the sensitivity of the habitat and the species, no winter maintenance be considered for this part of the TVP.

Maintenance in general must be done differently for this area. That means there should be minimal disturbance to the habitat. Generally maintenance of the TVP includes clearing at least a 0.5 m on either side of the path to provide a safe place for a pedestrian to get away from a speeding bike.

41. RECOMMENDATION: The pathway be a maximum of 3 m noting that it will be a least a metre wider due to maintenance activities.

Summer staff who do cutting of grass along pathways change more regularly than other city staff. This means that the training recommended in the EIS must be regular and re-occurring. The onus is on the city to provide this.

42. RECOMMENDATION:

- a. A species at risk biologist provide training each year for city summer staff.
- b. Summer staff be assigned to this area for the entire work season so that all workers in the area are trained.
- c. Any replacement staff be provided with the same training as the regular staff for this area.
- d. Any sightings of species at risk be reported immediately to a supervisor and then to a City Ecologist or the UTRCA. Each staff member be given this contact information during their training.

43. RECOMMENDATION: An annual report of training and any SAR species sightings be provided to a City Ecologist and a Species at Risk biologist at the UTRCA by October of each year.

44. **RECOMMENDATION:** No lighting be provided for this section of the TVP. This would mean an ever greater negative impact on Species at Risk. Even the EIS recommends that no lighting be part of this project.
45. **RECOMMENDATION:** Ensure there are regular patrols by Animal Control and by law officers to enforce the dog off leash requirements of the Parks By-Law. The non-peak times of year will be the most likely times for dogs off leash, although some will be off leash even during busy times. It will be very important to ensure there is visible enforcement during times when SAR are active.

POST CONSTRUCTION MONITORING

EEPAC continues to be concerned about post project monitoring in general. EEPAC's concerns are with the increased use of the area. Although there is unauthorized access to the private property from city lands, this is minimal given that the access is "off the beaten path."

46. **RECOMMENDATION:** Hire the Species at Risk biologist from UTRCA to develop the monitoring plan and to carry out the monitoring and reporting for a period of at least five years from the opening of the pathway, particularly on impacts to SAR and their habitat. The reporting must include reporting on any negative impacts on SAR and recommendations for stopping such impacts. Funding should be thru the project budget.

Theme #8 - MISCELLANEOUS RECOMMENDATIONS

47. **RECOMMENDATION:** The species at risk are named in some places of the draft EIS where they should have been redacted. The page numbers have been shared with staff and the consultant. This should be corrected in future versions of this document and the ESR.
48. **RECOMMENDATION:** Schedules to the Official Plan be updated through an Official Plan Amendment and in the London Plan, to reflect the Significant Woodlands, Wetlands and Corridors identified and shown in the EIS. (Figure 5 + the wetland on the Sisters of St. Joseph property)

Theme #9 - IS THE STUDY AREA ACTUALLY AN ESA?

The EA/EIS did not apply Council's criteria for determining if the study area should be considered an Environmentally Significant Area (OP Policy 15.4.1.3). While EEPAC feels this area meets the criteria for being an ESA, we hope that by remaining as "park" in the City's hierarchy, this area gets the funding necessary to deal with enhancements, invasive species management, by law enforcement and species protection. At this point, EEPAC is not aware of how the parks budget supports invasive species management on an ongoing basis. In ESAs, it is done under contract by the UTRCA.