Flow Location	100-Year Flow	250-Year Flow
(Model Junction ID)	(m³/s)	(m³/s)
W01.	4.2	5.1
WO2.	4.6	5.6
WO3	14.3	16.7
WO4.	4.5	5.0
WO5	32.7	38.3
WO6.	35.7	41.8
J.M9	35.8	41.2
M9	93.2	113.6
PCA2	21.0	25.2
РСАЗ	21.3	25.1
PCA4	2.4	2.8
PCA5	21.7	26.4
J.M10	22.9	28.1
M10	87.9	100.0
NL1	19.2	23.2
NL2.	2.7	3.2
NL3	23.8	30.9
NL4.	25.3	30.9
J.M11	26.0	32.1
M11	98.7	115.1
NL2-1	3.1	3.7
J.M15	3.7	4.5
M15	104.4	120.3
Т1	1.8	2.0
Т2	3.3	3.8
Т3	5.1	6.0
Т4	5.3	6.4
J.M16	8.0	9.2
M16	105.7	123.8

Table 3-16: Summary of Existing Condition Flows along Dingman Creek and TributariesLocated within Future Development Focus Area

3.2.4 Water Quality

Water quality, including the pollutant levels found in surface runoff, can impact both human and ecological well-being. The modification of natural environments to agricultural and urban land uses can impact the landscape, vegetation, and ecological functions within a subwatershed, which in turn can contribute to increases in the levels of pollutants in the

7098 & 7118 Kilbourne Road, London, ON - EIS by MTE

Received by EEPAC after notice of revised application posted March 2, 2022

reviewed by EEPAC member S. Levin and submitted to EEPAC meeting of March 17, 2022

BACKGROUND

Appreciate response to concerns raised by EEPAC in its review of the original EIS and other documents. The reduced footprint is a better outcome.

The Dingman EA was not referenced. This site is included and noted in the document (see Appendix I).

Figure 12 Naturalization and Mitigation d not have what is represented in the Key Plan. Figure 13 is illegible. Requested better copies.

EEPAC's review of the numbered RECOMMENDATIONS of the EIS (starting on page 23 of the document). EEPAC's recommendations below will be capital letters and in **bold**

Recommendation 2: A hydrogeologist should provide monitoring of the seepage areas on the valleyland slope post-construction to ensure there is no negative disruption to groundwater flow.

EEPAC agrees but unstated is what happens if there is a negative disruption? Possible mitigation or remediation should be established in the development agreement rather than later after it happening. EEPAC notes that despite its response to the original EIS, basements are still being considered for the development. Won't this mean dewatering?

EEPAC is not sure how the basements will be created without dewatering.

- A. EEPAC recommends no basements.
- B. If basements are to be constructed
 - dewatering must direct water away from the ESA.

- A requirement for immediate mitigation and any remediation be included in conditions of development is the hydrogeological monitoring concludes there has been a disruption of the groundwater flow.

Recommendation 3: Annual inspection of the water quality measures including inlet filter bags, floatable traps, sumps, filter socks and the Etobicoke infiltration system is needed to ensure long term maintenance. This requirement will need to become part of the Condominium agreement.

AGREED – however, even if part of the Condo agreement, what is the prospect of ensuring this work is done and reported?

C. EEPAC recommends that the Condominium agreement indicate that the inspection is done by the city or a contractor retained by the City and that the Condo be billed for the work. This

will ensure it is done to the satisfaction of the city and there are no negative impacts to water quality.

Recommendation 4 on page 24 relates to page 23 of the EIS and indicates a naturalization plan will be developed at detail design.

"To further improve the community, naturalization of the area that is currently mowed lawn into forest floor and shrub habitat will be completed to provide new successional habitat and improve the overall quality of the ESA [Figure 12]."

D. EEPAC recommends:

- The naturalization plans referred to in Recs 4 and 5 be to the satisfaction of a city Ecologist.
- E. EEPAC also recommends that any agreements related to the naturalization plan include:
- i. Clear requirements of who is responsible for the implementation
- ii. Clear information on who is responsible for monitoring
- iii. A clear timeline for the length of monitoring including a clear start date and length of time for monitoring
- iv. Specific requirements for sign off by the city as to the success of the plan.
- v. Specific requirements for any "do overs" if the original plan is not successful at any point during the length of monitoring.

The last paragraph of page 23 also includes reference to protecting trees on lots within the 10 m dripline through a Condominium Declaration specific to natural heritage protection. EEPAC notes that a Condominium Declaration is like the constitution of a condo. It is a thick document that is based on the *Act* and that each owner receives upon buying a unit in a condo. For resale condos, it comes with the status certificate. Given this:

F. EEPAC recommends that trees on those lots covered by the proposed Condominium Declaration are marked in some way. One way to do so is with the "wildlife tree" sign the city has used in some of its ESAs.

The signage for the ESA section of the property is also necessary due to the concern that the Declaration included in EIS recommendation #7 may not be the first place someone looks for what to do in and around their home.

Recommendation 6 re monument and signage

The sign is appreciated.

- G. EEPAC recommends that the proposed sign say something about why one should not enter into it. The reason shown on the draft sign included in the EIS is not specific enough.
- H. EEPAC Also recommends that an explanatory signage about the Lower Dingman ESA be placed in a similar location. It should also have a reference (URL or QR code to the following UTRCA information: <u>https://thamesriver.on.ca/parks-recreation-natural-areas/londons-esas/</u>

Recommendation 8 re information package

Agreed.

I. EEPAC recommends the information package be developed with input from the City, EEPAC and UTRCA. A base document is the city's Living with Natural Areas brochure (Appendix 2)

Recommendations 9 and 10 re Tree Preservation

Although EEPAC did not receive the plan, we agree that the recommendations be included in the conditions of development.

In Recommendation 12 we note that any proposed removal of bat maternity cavity trees must be reported to the Ministry before proceeding. Any bat boxes installed should be to the satisfaction of a city Ecologist given the mixed results of success with some types of bat boxes.

Recommendation 13 – agreed

Recommendation 14 re inspection of stormwater discharge during construction

This is often an issue with construction impacts. It is unclear who are the conscientious contractors.

J. EEPAC recommends that Development Services retain an inspector (and bill the proponent) during construction as run off down the steep slopes could be detrimental to the ESA. EEPAC points out if construction takes place where snow is on the ground, melting snow can also result is sediment discharges.

Recommendations 15 to 21 are standard recommendations that are usually reflected in conditions of development. The trick is in the monitoring during construction.

K. EEPAC recommends the inspector retained by Development Services as part of the previous EEPAC recommendation can monitoring the implementation of these recommendations during actual construction.

It appears from page 26 the monitoring plan will be fleshed out in greater detail at detail design and will include remediation measures if there are construction impacts.

- L. EEPAC recommends that it be made clear at detail design that decisions on remediation measures, if required, are at the sole discretion of the City and will be carried out at the earliest possible time. If discussions of responsibility are needed, they should take place after remediation.
- M. EEPAC continues to support the idea of the condominium corporation retaining the ESA lands as common area subject to the following conditions:

- The corporation allow the city bikeway to use the private road (this should be expressed in the rezoning recommendation from staff that the OS5 zone including a special provision deleting multi use pathways as a permitted use on the condo's Open Space lands.

- The proposed Natural Heritage Condominium Declaration be a condition of approvals and part of the legal condominium documents. It must include the requirement that the corporation and owners

work with a City Ecologist (with support from EEPAC if desired) and the UTRCA on a Management and Stewardship plan within 6 months of the first condo board meeting.

Page 26 and 27 discuss long term monitoring but seem to suggest that long term is only two years after the 8th unit is built. This is certainly too short a period given the unique nature of this development (ESA in private ownership with only signage to delineate the boundary and a retained butternut tree).

N. EEPAC recommends that a City Ecologist and/or UTRCA staff member be part of the first and each annual meeting of the Condo Corporation to speak to the membership about the ESA, the development and report on success of protecting the ESA thru the aforementioned Management and Stewardship Plan. This should also include advice as to winter maintenance including low salt options. The Ecologist and UTRCA member should be invited to the first meeting of the Condo Board to review the natural heritage matters with it. Ideally, the condo will be great stewards of the ESA if it takes a pride in what has been proposed here. This recommendation is consistent with the recommendations in the Net Effects Table included in the EIS.

ADDITIONAL RECOMMENDATIONS BY EEPAC

- *O.* Given the location adjacent to an ESA, EEPAC recommends the development conform to the Canadian Standards Association (CSA) A460:19, *Bird-friendly building design.*
- P. Elevations in the final engineering drawings must show that stormwater beyond the 2 year storm will be discharged to either the pond to the north or the private road and not into the ESA. (EEPAC did not receive a revised stormwater plan)

RETAINABLE BUTTERNUT TREE

Q. As noted in the MECP response in appendix H, the general habitat protection for butternut is 50 m not 25 m. The 50 m distance includes unit 7's backyard as shown on Figure 11. It should also be noted that Margot Ursic wrote the recovery strategy document for Butternut in 2013. She should be consulted on this matter.

BADGER INVESTIGATION 2018 - EIS Appendix L

R. EEPAC recommends repeating the badger investigation before development begins. Badgers are solitary (live alone) for most of the year. Adult males and females only get together to mate in late summer. The relevant section of Appendix L is reproduced here (highlighting by EEPAC):

Fox burrow cluster

The cluster of burrows is currently inhabited by larger mammals, (possibly still the family of foxes), based on traffic paths and evidence of recent feeding (turkey foot) and general disturbance. **Only one in the cluster appears to have been historically created by a badger, based on the amount and crescentshaped distribution of the spoil.** The additional burrows would have been added onto the original from the subsequent inhabitants, as badgers typically do not dig an exit. No other burrows showed any evidence of badger use or creation.

MISSING FROM THE EIS

There is no discussion of how snow removal from the private road will be addresses. The previous EIS mentioned winter maintenance. It is unclear from Figure 11 where snow will be stored. Is the intent to push it off property into the Open Space to the north? It would be better than letting it and sand and salt get into the groundwater thru the Etobicoke system.



Figure 3-19: Flow Nodes

Aquafor Beech Limited

February 2020

Stepping out in ESAs

Since you live adjacent to an ESA you probably visit it often. The very features that make our ESAs precious are also those that could be easily damaged. By following the guidelines below, you can enjoy these natural areas without harming them, and leave them in a healthy state for all to benefit from.

Use only the official access points and trails. When people and dogs leave the marked trails, wildlife and plants are trampled and disturbed. Most ESAs are mapped, have signed entrances to a marked trail system, and trails marked with yellow blazes. No Bikes except on the asphalt or crushed gravel paths in Kilally Meadows and Medway Valley. Carry in/Carry out your trash. Do not leave anything in an ESA. Help out by picking up any litter that you find, and dispose of it properly.

Leashes Please! Natural areas are not dog parks. All pets must be on leash (maximum 2 meters/ 6 feet). Remember to stoop and scoop!

Do not disturb wildlife or plants. It is illegal. Respect all plants and wildlife. Leave natural areas as you found them and do not feed the deer.

What can I take from an ESA?

Nothing! Bring a camera and take photographs.



Leave all wildlife, plants, seeds, flowers, soil, substrate, and deadfall in place. Every part of the ecosystem has an important and vital role to play in keeping ESAs healthy.

What is an invasive alien species?

Alien alert! Invasive alien species are non-native species - plants, animals, fungi, etc. - that evolved in another part of the world (e.g., Europe or Asia) and were transported to Ontario by humans. Invasive alien species can easily outcompete native species and lead to a decline in native biodiversity and reduced ecosystem functionality wherever they occur. Globally and locally, invasive alien species are one of the primary causes of habitat degradation and biodiversity loss today.



More Information

Ontario Invasive Plant Council http://www.ontarioinvasiveplants.ca/ index.php/other sites

Plant Selection for Environmentally Significant Areas

www.reforestlondon.ca/resources-healthy-city

City of London Information: Environmental and Parks Planning (519) 661-4980 **Environmentally Significant Areas**

Yard Waste Collection Information www.london.ca

Reforest London www.reforestlondon.ca

Upper Thames River Conservation Authority www.thamesriver.on.ca 519-451-2800



London





Brochure prepared and revised by EEPAC. {2014}

С m th Natural Areas

A Guide for Living Next to Environmentally **Significant Areas**

What is an ESA?

An Environmentally Significant Area

(ESA) is a natural area that receives the highest level of protection within the City of London. ESAs contain rare and endangered species, unique landforms, and habitats that are prized for their quality and high biodiversity. ESAs contain wetlands, freshwater ponds and streams, meadows, forests, valley lands, and other relatively undisturbed wildlife habitat.

Why are ESAs important?

ESAs are essential to the health and well-being of all Londoners because they provide ecosystem services, the most important being habitat for our native biodiversity. Our native biodiversity – indigenous plants, animals, fungi, and other organisms – enables our ecosystem to function properly. A fully functional ecosystem filters our freshwater, provides oxygen for us to breathe, cleans our air, provides decomposition for fertile soil, and provides a beautiful, natural environment in which to de-stress from our busy lives.

Is there a problem?

Yes! Even though our ESAs are protected from development, they are suffering from invasive alien species (see inset), encroachment, and misuse by the demands of our ever-growing human population.

Is there a solution?

Yes! It is the responsibility of each and every Londoner to help keep our ESAs healthy and in a natural state.



Alien Tree Species Example

Norway Maple (Acer platanoides)

Why this information is important to you!

You are one of the very fortunate members of the community who lives adjacent to an ESA; you have a special role to play. You are aware of the high value of your property, a way to keep that value is to minimize your impact on the ESA. You can help to maintain our ESAs in a healthy, natural condition that preserves the spectacular view from your home, and sustains the value of your home.

What you do around your home - impacts the environment.

Some of your actions may have a greater negative impact on the ESA. As such, it is important how you treat your yard and the area next to it.

Does it matter what I grow on my property?

Be careful when growing plants that are not native to Ontario (see INSET). Animals, wind, and water transport seeds, the mobile stage of a plant, from one place to another. Nature doesn't recognize property boundaries, and seeds can spread from gardens into ESAs.

Alien plants degrade natural habitats by reducing plant biodiversity, which in turn reduces animal biodiversity.



Native Planting brouchures www.reforestlondon.ca

Can I dump my yard waste or pond waste in the ESA?

NO! Do not dump any yard or pond waste into the ESA – it is illegal. And, you may be inadvertently transporting alien plants or animals into the ESA. Seeds and other plant parts in your waste can germinate or regenerate once inside the ESA. Pond waste may contain alien animals (e.g. goldfish or exotic snails) or plants that can wreak havoc on our native ecosystem. Compost your waste on your property, or take advantage of the city's regular, curb side pickup of yard waste materials.

Encroachment

Your lot ends at the property line. *Any activity extending onto public land is illegal*. Examples of encroachment include mowing, gardening, or installing structures such as sheds or fences in an ESA. Rear fences should not have a gate. Enter the ESA at designated access points, and use the official trails – don't make new ones. The cumulative impact of homeowners encroaching into the edges of ESAs effectively reduces their size, and threatens their integrity and value.

Your pets, did you know?

Cats and dogs can greatly disturb the wildlife and natural habitats so keep them from running loose in ESAs. Dogs and cats can hunt down and kill a variety of small animals, and cats kill thousands of birds each year. Our furry pets also disperse seeds of invasive alien plants. Seeds are transported in their fur, and in mud collected on their feet.

Don't release Aquarium stock or other household pets into ESAs. Aquarium plants and animals that you buy at pet stores are alien species in Ontario. Goldfish in particular have already been illegally released into our ESAs and are causing widespread damage. It is illegal to release any live plants or animals into an ESA.