

Report to Planning and Environment Committee

To: Chair and Members
Planning & Environment Committee
From: Gregg Barrett
Director, City Planning and City Planner
Subject: Environmental Studies, Private Land & Eastern Meadowlark
Habitat
Meeting on: July 13th, 2020

Recommendation

That, on the recommendation of the Director, City Planning and City Planner, the following report regarding Environmental Studies, Private Land & Eastern Meadowlark Habitat **BE RECEIVED**.

Executive Summary

This report contains an overview of the following topics:

- **Sections 2-3:** Best practices and legal limitations for conducting environmental studies that include private land, including the utility of aerial photography.
- **Section 4:** Provincial habitat regulations for the Eastern Meadowlark, and steps the City has taken to protect and restore grassland habitat. A brief summary of biodiversity offsetting is also included that provides context for the species' habitat regulation that in some circumstances, permits biodiversity offsetting.

This report is in response to the Council Resolution of November 13th, 2019.

- a) the Civic Administration **BE REQUESTED** to review and report back at a future Planning and Environment Committee meeting on best practices and legal limitations for performing Subject Land Status reports and Environmental Impact Studies on lands that are under private ownership and that are owned by multiple parties and, in particular, where one or more of the property owners refuse staff entry onto their lands;
- b) the Environmental and Ecological Planning Advisory Committee **BE REQUESTED** to perform an environmental scan of practices in other municipalities related to the above-noted evaluations; and,
- c) the Civic Administration **BE REQUESTED** to review the plan for Meadowlark habitat on a comprehensive ecological systems basis, so that Secondary Plans and Planning Applications can address habitat requirements in accordance with this larger context.

Analysis

1.0 Relevant Background

1.1 Subject Lands Status Reports & Environmental Impact Studies

The Subject Lands Status Report (SLSR) is part of a two-step evaluation, which includes 1) a SLSR at the time of the Secondary Plan, to confirm the boundaries of the natural features and areas, and 2) an Environmental Impact Study (EIS) at the time of specific development applications to ensure that the impacts of any development adjacent to these features and areas is mitigated. The SLSR is undertaken as part of the Secondary Plan when the appropriate Place Types are identified for the area and

the specific policy framework to establish the pattern of future growth and development is being established.

In accordance with Policy 1428_ of The London Plan, an SLSR is generally required in order to:

- Confirm and map boundaries of natural heritage features and areas.
- Evaluate the significance of lands in the Environmental Review Place Type on Map 1.
- Identify and evaluate the significance of other natural heritage features and areas which are not included in the Green Space or Environmental Review Place Types on Map 1 including those natural heritage features and areas shown on Map 5 and vegetation patches greater than 0.5 hectares in size.

Once the Place Type and policies are determined, the landowners may make applications for specific developments consistent with the Secondary Plan's policy framework. This may include applications for Subdivision, Zoning By-law Amendment and Site Plan.

In accordance with Policy 1431_ of the London Plan, EIS(s) are required prior to development in order to:

- Determine whether, or the extent to which, development may be permitted in areas within, or adjacent to, specific components of the Natural Heritage System.
- Confirm or refine the boundaries of the components of the Natural Heritage System.
- Include conditions to ensure development does not negatively impact natural features or ecological functions.

1.2 Collecting Ecological Data using Remote Sensing

Assessing ecological features and functions requires both site-specific and landscape-scale ecological data. Some patterns may only be detectable at a site-specific scale (e.g. evidence of species reproduction), whereas others may only be detectable at a landscape-scale (e.g. decline in habitat diversity). Advances in remote sensing have provided us with several high-resolution tools to collect landscape-scale data, including aerial photography, hyperspectral imagery and LiDAR. In many cases, historical aerial photography is the longest available, spatially contiguous record of landscape change, and is used to establish baselines for comparison against current conditions¹. These tools facilitate rapid and cost-effective assessments of biogeophysical data, and are used to delineate habitat patches, track changes in site conditions over time, and assess the significance of natural heritage features²⁻⁵.

Accordingly, the use of aerial photography is supported in the province's Natural Heritage Reference Manual (NHRM), the Ontario Wetland Evaluation System (OWES), the London Plan, and the City's Environmental Management Guidelines (EMG). Aerial photography supplemented with field studies where possible is the primary method for determining the boundaries of vegetation patches at the landscape-scale in the London Plan and secondary plans⁶. This process is outlined in the EMG⁷. Such tools are particularly useful when assessing areas where permission to enter has not been granted, and provide comparable accuracy to on-the-ground assessments^{3,8}.

It is also important to note that some of the criteria used to determine the significance of a natural heritage features such as significant woodlands, significant valleylands and environmentally significant areas are at the landscape, and not site-specific level. The satisfaction of these landscape level criteria may be sufficient to identify the feature as significant.

2.0 Private Land & Trespassing

2.1 Private Land in the Natural Heritage System

Approximately 75% of the features identified on **Map 5 – Natural Heritage** are on privately-owned lands. In accordance with Policy 765_ of the London Plan, the inclusion of privately-owned lands within the Green Space Place Type will not imply that the land is accessible to the public. Permissions for public access to privately-owned property within the Green Space Place Type will be at the discretion of the property owner.

2.2 Trespass to Property Act

Anyone who enters private property without the occupier's permission, or under legal authority, is trespassing⁹. If they fail to leave when told to do so, they can be found guilty of an offense under the *Trespass to Property Act*. Occupiers do not always need "No Trespassing" signs, and entry can be prohibited without notice. The burden of proof that permission was given is on the defendant. Examples of people who have the authority to enter private property include land surveyors, utility meter readers, building inspectors, public health inspectors, conservation authority staff and by-law officers.

3.0 Best Practices for Securing Property Access

3.1 Obtaining Permission to Enter^{10,11}

- Start asking for property access early and be prepared for high rejection and non-response rates. Property owners may need some time to consider a project's implications, and whether they feel comfortable granting access.
- Contact property owners in a safe and respectful way. Mail requests to their address, visit the property in person and engage with neighbourhood groups.
- Make sure that you give property owners enough information about your project to explain the importance and implications of the work. Be prepared to present research, methods, and timeline to property owners using outreach materials.
- Discuss any known site hazards or restrictions. Get signed permission forms and make copies. Ensure the person granting access has the authority to do so.
- Treat the property owner's time and property with respect. If a person does not grant permission to enter, thank them for their time and move on.

3.2 Maintaining Permission to Enter^{10,11}

- If needed, adjust sampling to accommodate the schedule of the property owner. Property owners will often request to be present while you are on their property.
- Clearly communicate your sampling schedule and activities with property owners and avoid rescheduling. Follow property-specific rules to which you have agreed.
- Always thank landowners who grant land access. Follow up with results specific to the property or neighborhood and emphasize their contribution to the study.

3.3 Conducting Studies without Permission to Enter^{10,11}

Permission to enter all properties subject to an environmental study is rarely granted. This has been the Ecologist's professional experience while conducting ecological research and was identified in the Environmental and Ecological Planning Advisory Committee's response to Part b) of the Council Resolution:

“We (EEPAC) approached Dr. Gary Epp of AECOM who has done extensive work in Ontario. He indicated: ‘I am not aware of a particular incentive that municipalities have for gaining access to private lands for the purposes of conducting studies. We do have considerable experience with trying to gain access to private lands by various proponents of studies, either municipal or provincial agency (i.e. MTO). In those cases, it is a challenge to get permission to enter. It usually takes a great deal of effort and forward planning. Typically, it is considered to be successful if access to 30% of the properties is granted. Sometimes the incentives offered include a nominal fee of several hundred dollars, and or, the provision of the raw data collected for the property.’ We also asked other environmental consultants who indicated that the participation rate goes up when notices are personally delivered to landowners. This gives the proponent / consultant an opportunity to explain the benefits of participation. - Sandy Levin/Susan Hall”

The following steps allow environmental studies to continue where access to all private land in the study area has not been granted:

- Account for rejection and non-response from property owners during site selection, as well as the potential loss of sites throughout your project.
- Remote sensing tools (e.g. aerial photography) and photos of the subject property taken from the adjacent property(ies) can be used to fully or partially characterize certain ecological features and functions on private land; as supported in the NHRM, OWES and EMG.

4.0 Eastern Meadowlark Habitat

4.1 Protections for the Eastern Meadowlark in Ontario

The Endangered Species Act (2007) provides protections for endangered and threatened species and their habitats in Ontario¹². Species-specific regulations describe the area of habitat protected for a species, and the level of disturbance permitted within protected habitat¹³. If an activity that is expected to negatively affect a species or its habitat is proposed, proponents must obtain permits or authorization with conditions that aim to protect and recover the species. Proponents can avoid authorizations through modifications to their work (e.g. alter the timing of their work) that avoid negative effects on species at risk. Under some circumstances, proponents may be granted a regulatory exemption, which enables activities that wouldn't otherwise be allowed under the act.

The Eastern Meadowlark is a ground-nesting, grassland songbird listed as Threatened under the Endangered Species Act (2007). The species population is declining due to loss of breeding habitat, declining habitat quality and low reproductive success associated with habitat loss and agricultural intensification¹⁴. In Ontario, the habitat regulation for the Eastern Meadowlark states that development activities that damage or destroy ≤ 30 hectares of Eastern Meadowlark habitat do not require a permit, provided that conditions to create or enhance habitat, and manage that habitat are met¹⁵. Specifically, proponents must commit to creating or enhancing habitat, ensure that the new habitat is larger than the previous one, and manage the habitat for up to 20 years. Regulatory exemptions for damaging or destroying Eastern Meadowlark habitat also exist, and the amount of habitat that needs to be replaced depends on the type of development, ranging from 10-100% replacement of destroyed habitat¹⁶. The permitting process for species at risk as well as habitat creation and enhancement programs are administered by the Ministry of Environment, Conservation and Parks.

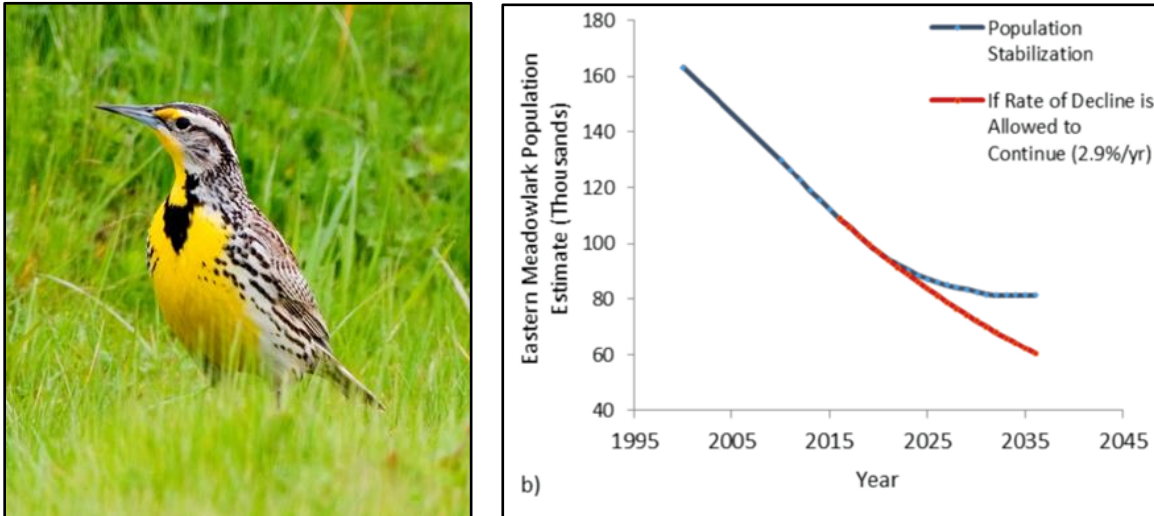


Fig. 1: (a) Eastern Meadowlark; (b) Eastern Meadowlark population estimates (2000-2036). The blue line projects that the implementation of all recovery actions, including the preservation of current habitat and creation of higher quality habitat, will stabilize the population in approximately 15 years. If the current rate of decline (2.9%/yr) continues, the red line projects the decline of the population in Ontario¹⁷.

4.2 Protecting, Managing & Enhancing the Natural Heritage System in London

The City of London undertakes conservation initiatives to protect, manage and enhance London's natural heritage system. Invasive species management, restoration and native planting efforts as well as responsible infrastructure development are utilized to protect and enhance Eastern Meadowlark habitat, as described in the attached Memorandum (AECOM, February, 2020).

The City of London is a nationally recognized leader in invasive species management and has multiple completed and in-progress restoration projects. These efforts have increased the extent of native vegetation and the quality of wildlife habitat within London, including grassland habitat suitable for Eastern Meadowlark.

- The City's 12 publically-owned Environmentally Significant Areas (ESA) (740 ha) are managed to protect and enhance their ecological integrity, and support multiple species at risk and high-quality habitats. Removal of woody, invasive species like Common Buckthorn has enhanced the quality of Eastern Meadowlark habitat in ESAs. Most ESAs include grasslands and have ongoing restoration projects to restore, enhance or create grassland habitat.
- Staff have retained consultants to draft an ecological restoration plan for Kelly Stanton ESA to continue the protection and enhancement of lands (18.5 ha) where Eastern Meadowlarks successfully raise fledglings each year.
- The Dingman Creek Erosion Control Wetland is an example of the City's leadership in habitat restoration. The wetland (21 ha) was created in 2015 on former agricultural land, and combines storm water management green infrastructure with natural wetland habitat. The wetland is a recognized birding hotspot, and includes restored grassland habitat in which Eastern Meadowlarks and other notable bird species have been recorded¹⁸.
- A future project that could include the creation or enhancement of Eastern Meadowlark or other species at risk habitat, similar to the Dingman Creek Erosion Control Wetland, is the Dingman Creek Environmental Assessment (EA) Master Plan. The overall concept of the EA is to create a naturalized corridor within south London as part of the storm water management strategy. The study includes creating a "complete corridor" to connect natural heritage features and convey water, wildlife and people across the sub-watershed.

In the City of London, Eastern Meadowlark breeding habitat has been confirmed on both public and private lands, and the species has been observed throughout the City and Natural Heritage System¹⁹. Eastern Meadowlark habitat is protected as the habitat of endangered and threatened species under the Endangered Species Act (2007), the Provincial Policy Statement (2020) and in accordance with Policy 1328_ of the London Plan. If development or infrastructure is proposed in or near species at risk habitat, proponents must follow federal, provincial and municipal policies for species at risk. Avoidance, minimization and mitigation of impacts is the preferred approach. However, under some circumstances, the option to create or enhance habitat to compensate for that which was damaged or destroyed elsewhere is chosen. This process is a form of biodiversity offsetting, which involves generating gains in biodiversity (e.g. habitat, species, ecological functions) to compensate for losses from projects elsewhere²⁰.

4.3 Biodiversity Offsetting

Ecological damage caused by development can sometimes be compensated by enhancing habitats, establishing new protected areas, or other management actions²¹. Biodiversity offsetting is the fourth step of the mitigation sequence framework for biodiversity conservation, in which negative ecological impacts are first avoided completely, then minimized by appropriate project design, then mitigated using actions such as local habitat restoration²². If residual damage to biodiversity is unavoidable, negative impacts can be compensated for elsewhere through offsetting, as a last resort^{22,23}. Offsetting is a tool that aims to achieve No Net Loss or Net Gain of biodiversity against a background of ongoing development, and can provide a flexible alternative for proponents to continue their activities without a detrimental net effect on the environment. However, given the low success rates of ecological restoration, the time it takes to recover biodiversity, and the challenges in quantifying biodiversity, the circumstances under which No Net Loss of biodiversity is feasible are limited^{21,24,25}.

Accordingly, biodiversity offsetting actions should be carefully applied, and the suitability of offsetting should be assessed relative to management objectives and the biodiversity features involved²⁶. Offsetting must be supported by strong scientific evidence that the offsets are ecologically equivalent to the area that was lost elsewhere, and must be appropriately implemented, monitored, and enforced^{22,27,28}. Importantly, offsetting must not be a mechanism through which the damage of species and habitats can be justified²⁷. Offsetting can be a useful tool where avoidance, minimization and mitigation have been thoroughly evaluated and are unlikely to achieve No Net Loss or Net Gain²¹. In some cases it is possible to secure more biodiversity through offsetting than to protect individual features and surround them with development²⁶. However, the importance of small habitat patches should not be discounted, as there is no evidence to support the principle that large contiguous patches contain more biodiversity than multiple small patches of the same total area²⁹.

Given the potential utility of biodiversity offsetting, guidelines for offsetting options in the City of London's Natural Heritage System are being explored in the update of the City's Environmental Management Guidelines. In accordance with Policy 1401_ of the London Plan, offsetting is permitted in the Natural Heritage System. Although there is no consistent provincial policy framework for biodiversity offsetting in Ontario, there is detailed information available in the scientific literature and best practices developed by internationally recognized institutions including the International Union for Conservation of Nature (IUCN)²² and Ontario Nature²⁶.

An example of offsetting that has been used in London, under the Eastern Meadowlark habitat regulation, is a habitat replacement project established with Ducks Unlimited and the County of Haldimand. This project aims to offset the impacts of multiple City-led projects in London by purchasing and restoring land in rural areas where more space is available to secure larger and higher quality habitats than in suburban areas. In total, 9.5 contiguous hectares of new Eastern Meadowlark habitat will be created through a Habitat Conservation Agreement with the Landowner and Ducks Unlimited. This project complies with regulations under the Endangered Species Act (2007) and aims to

achieve No Net Loss of Eastern Meadowlark habitat. The involvement of independent third parties such as Ducks Unlimited is a best practice that London has accomplished, as these groups are able to monitor and support the project and ensure that the ultimate goal – the protection of biodiversity – is achieved.

5.0 Conclusion

- Permission to enter all properties subject to a SLSR or EIS is rarely granted.
- The use of both field studies and remote sensing tools is the best approach to assessing the significance of ecological features and functions in the City's Natural Heritage System. Aerial photography is frequently used to assess the characteristics and significance of ecological features on private land.
- Obtaining land access is about relationship building, and requires a mutual understanding of the potential outcomes of your work on a persons' property.
- Protections for species at risk are administered by the province, not the City of London. In accordance with Policy 1328_ of the London Plan, development and site alteration is not permitted in the habitat of endangered and threatened species, except in accordance with provincial and federal requirements.
- The City is taking significant steps to implement protection and recovery goals for the Eastern Meadowlark, and has seen tangible results from restoration projects. In rare cases where areas of Eastern Meadowlark habitat are damaged or destroyed, the City meets requirements for habitat creation and enhancement.
- Biodiversity offsetting is a management tool that should only be used as a last resort, after exhausting all options for avoidance, minimization and mitigation of impacts on biodiversity. It should also only be used where federal, provincial and municipal requirements do not protect ecological features or functions. Offsets must be ecologically equivalent to that which was lost, and No Net Loss or Net Gain of biodiversity must be demonstrated for offsetting to be achieved^{26,27}.

5.1 Recommendations

- The City should continue to work with proponents, organizations and volunteers to implement protection and recovery objectives for the Eastern Meadowlark¹⁴.
- Consider '3.0 Best Practices for Securing Property Access' and '4.3 Biodiversity Offsetting' for the update of the Environmental Management Guidelines.
- Pending the possible development of guidelines for biodiversity offsetting in the Environmental Management Guidelines, the City could work to identify areas suitable for biodiversity offsetting. Potential areas that could be used, while also improving the connectivity and integrity of the Natural Heritage System, are mapped as Potential Naturalization Areas on **Map 5 – Natural Heritage**.

5.2 Addressing the Need for Action on Climate Change

On April 23, 2019, the following was approved by Municipal Council with respect to climate change:

Therefore, a climate emergency be declared by the City of London for the purposes of naming, framing, and deepening our commitment to protecting our economy, our ecosystems, and our community from climate change.

The recommendations in this report are directly relevant to the commitments outlined in the City's climate emergency declaration. Globally, 25% of all species are considered threatened, and in the coming decades, climate change is projected to increase extinction risk for an additional 15-37% of species^{30,31}. Ensuring that policies and

legislation that protect rare, threatened and endangered species are implemented in London will contribute towards the conservation of Canada's incredible biodiversity.

Prepared by:	Sean Hudson, M.Sc. Ecologist, Long Range Planning and Sustainability
Submitted by:	Mike Fabro, M.E.B., P.Eng. Manager, Long Range Planning and Sustainability
Recommended by:	Gregg Barrett, AICP Director, City Planning and City Planner
Note: The opinions contained herein are offered by a person or persons qualified to provide expert opinion. Further detail with respect to qualifications can be obtained from Planning Services	

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Attach

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