

To:

Linda McDougall, City of London

CC:

Gary Epp, AECOM Carsten Slama, AECOM AECOM Canada Ltd. 410-250 York St. London, ON N6A 6K2 Canada

T: 519.673.0510 F: 519.650.3424 aecom.com

Project name:

Eastern Meadowlark Review

From:

Brandon Holden, AECOM

Date:

February 29, 2020

## Memorandum

Subject: Eastern Meadowlark (Sturnella magna) Conservation Initiatives - City of London

The City of London (the City) is committed to protecting Eastern Meadowlark (*Sturnella magna*), a provincially and federally Threatened species (COSEWIC 2011, COSSARO 2011), and its habitat. Notable effort and resource planning have been undertaken by the City including but not limited to the following:

**Invasive Plant Management Strategy:** The City has developed and implemented the London Invasive Plant Management Strategy (City of London 2017) which focuses on controlling and preventing the spread of invasive species on public property to protect, restore and enhance the natural heritage system. Invasive species such as Common or Glossy Buckthorn (*Rhamnus / Frangula spp.*) outcompete native grassland vegetation and can convert these ecosystems into overgrown wooded thickets. As Eastern Meadowlark are reliant on grasslands, savannahs, and open fields for breeding and foraging (Jaster *et al.* 2012), this change directly results in the loss of suitable habitat. The City has identified Common and Glossy Buckthorn as a priority species and has actively engaged in its removal every year since 2006 as identified leaders in invasive species management in Ontario.

It should also be noted that creating new habitat for Eastern Meadowlark (i.e. through land acquisition) could be prohibitively expensive and efforts of this nature would not provide a substantive benefit to the overall Eastern Meadowlark population in our region; therefore, maintaining large areas of core habitat within City-owned lands, particularly through managing invasive species, is a highly effective use of time and resources. These efforts go a long way in not only protecting critical habitat for Eastern Meadowlark, but other native grassland or savannah species.

Restoration, Stewardship, and Native Planting Efforts: The Province of Ontario's Bobolink and Eastern Meadowlark Recovery Strategy (McCracken *et al.* 2013) identifies breeding habitat loss and degradation (predominately the conversion of pasture to cropland) as the primary threat to Eastern Meadowlark. Natural succession also ultimately changes grassland habitat into thickets or forests where wildfires are suppressed, or human intervention is lacking (McCracken *et al.* 2013). As a result, habitat types are dynamic, and their protection possess unique challenges. The City has recognized the need to support Eastern Meadowlark and actively works towards maintaining and restoring native vegetation communities on City owned lands, particularly in core areas such as ESAs. City staff, restoration professionals and trained volunteers in the Adopt an ESA program participate in stewardship activities through litter clean-up, invasive species removal, and the planting of native species (City of London 2019). These efforts ultimately provide a net benefit to Eastern Meadowlark.

Responsible Infrastructure Development: The City engages in meaningful consultation and environmental assessments with regard to infrastructure development that may affect Eastern Meadowlark habitat. Such disturbances are primarily limited to feature edges (i.e. the widening of a city road into neighbouring ditches) where the core Eastern Meadowlark habitat remains intact. Studies have shown that grassland species of birds tend to nest away from habitat edges (Bollinger and Gavin 2004) and utilize central expanses of open fields and fallow areas for breeding and nesting. As a result, works that affect the margins of habitat features are unlikely to cause a status change or reduce the number of breeding pairs able to make use of the available habitat. Construction and Post-Construction management and monitoring of invasive species near development, as well as restoration plans that use native species serve to further protect the function of the core habitat well after works have been completed. The City will continue to track and monitor disturbances to Eastern Meadowlark habitat and ensure proper mitigation measures are implemented to augment protection efforts with the understanding that protection of threatened species and their habitat occurs under the *Endangered Species Act*, administered by the Ministry of the Environment, Conservation and Parks.

## References:

- Bollinger, E.K., and T. A. Gavin. 2004. Responses to Nesting Bobolinks (*Dolichonyx oryzivorus*) to Habitat Edges. The Auk. 121(3). pp 767-776.
- City of London (2017). London Invasive Plant Management Strategy.

  https://www.london.ca/residents/Environment/Natural Environments/Documents/Invasive\_Plant\_Management\_Strategy.pdf
- City of London (2019). Adopt an ESA. https://www.london.ca/residents/Environment/Natural Environments/Pages/Adopt-an-ESA.aspx
- COSEWIC. 2011. COSEWIC assessment and status on the Eastern Meadowlark *Sturnella magna* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. x+40 pp. https://wildlife-species.canada.ca/species-risk-registry/virtual\_sara/files/cosewic/sr\_eastern\_meadowlark\_0911\_eng.pdf
- COSSARO. 2011. COSSARO Candidate species at risk evaluation for Eastern Meadowlark (*Sturnella magna*). https://www.ontario.ca/page/eastern-meadowlark-evaluation
- Jaster, L. A., W. E. Jensen, and W. E. Lanyon (2012). Eastern Meadowlark (*Sturnella magna*), version 2.0. In The Birds of North America (A. F. Poole, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bna.160
- McCracken, J.D., R.A. Reid, R.B. Renfrew, B. Frei, J.V. Jalava, A. Cowie, and A.R. Couturier. 2013. Recovery Strategy for the Bobolink (Dolichonyx oryzivorus) and Eastern Meadowlark (*Sturnella magna*) in Ontario. Ontario Recovery Strategy Series. Prepared for the Ontario Ministry of Natural Resources, Peterborough, Ontario. viii + 88 pp.