

**PERMIT UNDER clause 17(2) (c) of
THE ENDANGERED SPECIES ACT, 2007**

Permit Number: AY-C-004-11

Issued to: Her Majesty the Queen in right of Ontario

As represented by the Ontario

Ministry of Transportation ("MTO")
Windsor Borders Initiative Group
Implementation Group
659 Exeter Road,
London, ON, N6E 1L3

Location: Permit Lands in the City of Windsor, as identified in Appendix A

Term: This permit comes in to force on the date it is issued and expires on December 31, 2021.

1. **Authority.** This permit is issued to MTO under clause 17(2) (c) of the Endangered Species Act, 2007 (ESA).
2. **Application to species.** This permit applies to Eastern Prairie Fringed-orchid (*Platanthera leucophaea*), a species listed as endangered on the Species at Risk in Ontario List.
3. **Authorization.** This permit authorizes MTO to engage in the activities specified herein that would otherwise be prohibited by sections 9 and 10 of the Endangered Species Act, 2007.
4. This permit authorizes MTO to;
 - a. Damage and destroy habitat within the Eastern Prairie Fringed-orchid Impact Site identified in Appendix A.
 - b. Kill, harm, take, possess and transport any Eastern Prairie Fringed-orchid individuals located in Eastern Prairie Fringed-orchid Impact Site identified in Appendix A.
 - c. Carry out activities authorized by this Permit, and to fulfill Conditions 7 to 27 of this Permit.
5. The activities authorized in this permit are subject to the conditions set out in sections 7 through 27 inclusive.

6. Appendix A – Permit Lands, Eastern Prairie Fringed-orchid Impact Site, and Eastern Prairie Fringed-orchid Habitat Enhancement Site forms part of this permit.
7. **Definitions.** In this permit the following words shall have the meanings specified:
- i. “Construction” means erection, alteration, repair, dismantling, demolition, structural maintenance, land clearing, earth moving, grading, excavating, trenching, digging, boring, drilling, blasting, or concreting, the installation of any machinery or plant, and any work or undertaking in connection with the Windsor-Essex Parkway, but does not include the erection of fencing or temporary snake barriers.
 - ii. “WEP” means Windsor-Essex Parkway.
 - iii. “DRIC” means Detroit River International Crossing.
 - iv. “MTO” means the Ministry of Transportation of Ontario and its agents.
 - v. “Eastern Prairie Fringed-orchid Habitat Enhancement Site” means the site identified in Appendix A.
 - vi. “Permit” means this permit.
 - vii. “Permit Lands” means the lands on which activities authorized by this Permit shall be carried out, including activities related to construction, mitigation and restoration, designated in Appendix A.
 - viii. “Eastern Prairie Fringed-orchid Impact Site” (the “Impact Site”) means the lands designated in Appendix A within the Permit Lands on which there will be an impact on Eastern Prairie Fringed-orchid habitat from construction of the WEP.
8. The designated representative of the Ministry of Natural Resources (“MNR”) Aylmer District office, for the purposes of the activities outlined within this permit, will be:

Mitch Wilson
District Manager
Ministry of Natural Resources, Aylmer District
615 John Street North
Aylmer, ON N5H 2S8
Tel: 519-773-4710 Fax: 519-773-9014
Email: Mitch.Wilson@ontario.ca

9. If MNR Aylmer District office changes its designated representative for the purposes of the activities authorized or required by this permit, MNR will provide notice in writing to MTO.
10. A copy of this Permit shall be kept in a location within the Permit Lands, where it can be produced immediately upon request.
11. A designated MTO representative shall be identified to MNR in writing, to the attention of the designated representative of the MNR Aylmer District office, a minimum of seven days prior to carrying out any activity authorized by this permit.
12. Any changes to the MTO representative shall be identified to MNR in writing, to the attention of the designated representative of the MNR Aylmer District office, within 72 hours of the change.
13. Before any person begins working on any aspect of the construction of the Windsor-Essex Parkway within the Permit Lands, MTO shall provide that person with a fact sheet identifying Eastern Prairie Fringed-orchid and providing species-specific guidance with respect to appropriate actions to be taken whenever a member of these species is encountered.
14. Before any person begins carrying out any mitigation or monitoring activities authorized by this Permit, MTO shall ensure that the person receives training on Eastern Prairie Fringed-orchid by persons authorized by MNR.
 - a. MTO shall keep records indicating who has received species at risk training.
 - b. MTO shall make these records available to MNR upon request.
15. For the purpose of habitat enhancement MTO shall actively control invasive species where necessary within the Eastern Prairie Fringed-orchid Habitat Enhancement Site. If a herbicide will be applied to control invasive species, the herbicide application shall occur in accordance with this Condition:
 - a. All persons applying an herbicide under the authority of this Permit must be licensed under the *Pesticides Act, 2009*.
 - b. If an herbicide will be used, MTO shall comply with section 33 of O. Reg. 63/09 under the *Pesticides Act, 2009*. Upon request from MNR, MTO shall produce proof of its receipt of the opinion from a Director of MNR as required under O. Reg. 63/09.
 - c. MTO shall control invasive species on the Permit Lands in accordance with methods described in the Dense Blazing Star Management Plan approved by MNR under Permit AY-D-001-09.

16. For the purposes of habitat enhancement MTO shall act to halt or regress successional changes within the Eastern Prairie Fringed-orchid Habitat Enhancement Site. Activities authorized by this Permit in relation to the halting or regression of successional changes shall occur in accordance with this Condition:

- a. If a prescribed burn will be used, it shall be conducted in accordance with the following conditions:
 - i. MTO shall retain a qualified prescribed burn specialist, who shall prepare for the Eastern Prairie Fringed-orchid Habitat Enhancement Site a Prescribed Burn Application and Complexity Analysis, and a Prescribed Burn Protocol which will define the conditions under which a prescribed burn can safely occur and be controlled. The prescribed burn specialist shall provide oversight for all prescribed burns.
 - ii. The prescribed burn specialist shall have the following qualifications and expertise:
 - knowledge about where it is appropriate to restore a fire regime, the required intensity, the fuel consumption and spread patterns, desired seasonality, frequency and how to carry out a prescribed burn;
 - as a minimum, be qualified for the Low Complexity Prescribed Burn Boss level; and
 - education and experience in the technical aspects of fire.
 - iii. Prescribed Burn Application and Complexity Analysis, and Prescribed Burn Protocol developed by the prescribed burn specialist shall be provided to MNR for technical review prior to any burn activity.
 - iv. All burn activities shall be conducted in accordance with the Prescribed Burn Application and Complexity Analysis, and Prescribed Burn Protocol made under condition 16(a)(i).
- b. In areas where prescribed burns cannot be conducted, MTO shall mow for the purposes of habitat enhancement. All mowing shall be conducted in accordance with the following conditions:
 - i. Mowing shall be conducted only after November 15 of any year.
 - ii. Plant material shall be removed following mowing.
- c. Any woody species control shall be conducted in accordance with the following conditions:

- i. Stems shall be cut in accordance with woody species control strategies in the MNR approved Dense Blazing Star Management Plan.
 - ii. If herbicide treatment is required for cut stumps, application of herbicide shall be conducted in accordance with Condition 15.
 - d. Despite Conditions 16 (a) – (c), MTO may act to halt or regress successional change by any other method that is approved by MNR if it results in equal or greater benefit to Eastern Prairie Fringed-orchid habitat.
- 17. MTO shall maintain a barrier along the boundary between the Eastern Prairie Fringed-orchid Impact Site and the Eastern Prairie Fringed-orchid Habitat Enhancement Site to protect the Enhancement Site from incidental damage due to construction activities.
- 18. MTO shall transplant any individuals of Eastern Prairie Fringed-orchid that are located within the Impact Site identified in Appendix A in accordance with the following conditions:
 - a. Transplanting shall occur after flowering is completed, no earlier than August 1.
 - b. Soil surrounding the Eastern Prairie Fringed-orchid shall be retained and shall include the entire root mass, with a minimum depth of 20 cm and a minimum radius of 20 cm measured from the stem of the individual.
 - c. The root ball containing the Eastern Prairie Fringed-orchid shall be transplanted immediately within the Habitat Enhancement Area identified in Appendix A into a hole large enough to accommodate the root ball.
 - d. MTO shall water newly transplanted individuals thoroughly with a watering can.
 - e. Transplanted individuals shall be visually assessed weekly for a minimum of eight weeks to assess their health, and watered if plants are observed to be wilted.
- 19. MTO shall retain a qualified botanist to monitor and report on the habitat enhancement for Eastern Prairie Fringed-orchid in the Eastern Prairie Fringed-orchid Habitat Enhancement Site starting in 2012, in accordance with the following:
 - a. The qualified botanist shall have the following minimum qualifications and experience:
 - i. knowledge of Ontario species at risk.

- ii. knowledge of the *Endangered Species Act, 2007*.
- iii. knowledge of the Permit.
- iv. knowledge of southern Ontario ecosystems, including Tallgrass Prairie species/families and their management.
- v. knowledge of the Ecological Land Classification for Southern Ontario.
- vi. experience conducting plant/vegetation community monitoring (e.g. systematic surveys, photomonitoring, etc.).

20. The qualified botanist shall conduct surveys within the Eastern Prairie Fringed-orchid Habitat Enhancement Site shown in Appendix A in accordance with the following conditions:

- a. Surveys shall be conducted twice annually for the duration of the Permit. An initial survey shall be conducted between June 20th and July 20th during the flowering period. A second survey shall be conducted in the month of August after flowering is completed to assess whether seed pods have formed. Surveys may be conducted at other dates subject to approval by MNR.
- b. If any individuals are observed within the Eastern Prairie Fringed-orchid Habitat Enhancement Site, the qualified botanist shall record, at a minimum, the following information:
 - i. Number of individuals;
 - ii. GPS location of all individuals, including accuracy of GPS reading;
 - iii. Health status of all individuals, i.e., good, poor, or dead;
 - iv. Number of stems of transplanted individuals;
 - v. Phenological stage of all individuals, i.e:
 - vegetative
 - in bud
 - flowering
 - past flowering with no evidence of capsule development
 - fruiting with evidence of capsule development
 - senescent

- vi. Evidence of damage to individuals, and the cause of the damage, if it can be determined;
- vii. Photographic record of individuals and habitat.

21. The qualified botanist shall assess the Eastern Prairie Fringed-orchid Habitat Enhancement Site annually, following methodologies described in the Dense Blazing Star Management plan approved by MNR under permit AY-D-001-09. MTO shall collect and record the following information, at a minimum:

- a. An estimate of the area of occupancy of invasive species (with mapping);
- b. An estimate of the area of occupancy of woody or shrubby species (with mapping);
- c. Quadrat surveys; and
- d. Photomonitoring surveys.

22. MTO shall provide annual monitoring reports to MNR, starting one year after this Permit is in force. The monitoring report shall contain the following information with respect to the Eastern Prairie Fringed-orchid population at the Eastern Prairie Fringed-orchid Habitat Enhancement Site:

- a. Recorded results of Eastern Prairie Fringed-orchid surveys conducted in accordance with conditions 20 and 21;
- b. Status of all habitat restoration and enhancement efforts occurring in compliance with the conditions of this Permit;
- c. Status of invasive species removal conducted in accordance with condition 15;
- d. Effectiveness of invasive species control methodologies, as measured by the area of occupancy of all invasive species within the Eastern Prairie Fringed-orchid Habitat Enhancement Site;
- e. Effectiveness of woody species control methodologies, as measured by the area of occupancy of all woody species within the Eastern Prairie Fringed-orchid Habitat Enhancement Site;
- f. Effectiveness of habitat restoration and enhancement, as measured by diversity and cover of native prairie species identified in quadrat surveys;
- g. Cause of damage to habitat i.e., by wildlife, vandalism or unusual natural events.

23. The designated representatives for MNR and MTO, identified in Conditions 7 and 11 shall hold annual meetings to discuss the annual report and discuss opportunities for adaptive management.
- a. The designated representatives for MNR and MTO may invite additional persons to attend the meetings.
24. MTO shall submit a Final Report, no later than December 31, 2021, which summarizes all monitoring activities conducted and summarizes the status and success or failure of all mitigation actions.

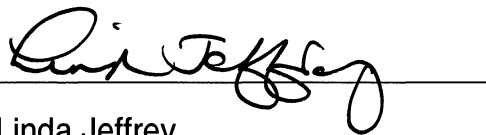
Adaptive Management

25. MTO may use management practices other than those identified in this Permit, if that method is approved by MNR as providing equal or greater protection to the Eastern Prairie Fringed-orchid, and takes into account the best scientific knowledge available.

Long Term Land Protection

26. Should MTO plan to divest of any of the Eastern Prairie Fringed-orchid Habitat Enhancement Sites within the Permit Lands, MTO shall, before the expiry of the Permit, provide for the long-term protection of the Eastern Prairie Fringed-orchid by granting a conservation easement to a conservation body under the *Conservation Land Act*, R.S.O. 1990, c. C. 28. The conservation body and the terms of the conservation easement must be approved by MNR.
27. Despite Condition 26, MTO may provide for the long-term protection of the Eastern Prairie Fringed-orchid by a method other than by granting a conservation easement, if that method is approved by MNR as providing equal or greater long-term protection than a conservation easement.

Pursuant to the authority of clause 17(2) (c) of the Endangered Species Act, 2007, I hereby issue this permit authorizing the activities described above, subject to the conditions set out herein.



Linda Jeffrey

Minister of Natural Resources

AUG 17/2011

Date of issuance:

Appendix A

This appendix has been removed as it indicates location of sensitive species.