



AUG 09 2019

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M3H 5T4

PINs 582020377; 582020401; 582020402; 582020500;
582020501; 583520001; 583520071; 583520073; 583520135;
583520193; 582020378; 582020379; 582020380; 582020384;
582020386; 582020387; 582020388; 582020390; 582020391;
582020392; 582020393; 582020400; 583520003; 583520007;
583520049; 583520068; 583520084

August 1, 2019

Dear Landowner or Land Manager,

Re: Seeking your input and involvement on the Proposed Recovery Strategy for the Hine's Emerald (*Somatochlora hineana*) in Canada.

The Hine's Emerald (*Somatochlora hineana*) is a relatively large dragonfly listed as Endangered under both the federal *Species at Risk Act* (SARA) and Ontario's provincial *Endangered Species Act, 2007*. In Ontario, the Hine's Emerald occurs in one single location – the Minesing Wetlands in Simcoe County.

Under SARA, the federal government is required to develop a recovery strategy for endangered species to help guide the actions needed to stop or reverse their decline. For Hine's Emerald, the Government of Canada is adopting the Government of Ontario's Recovery Strategy with some additions.

The proposed recovery strategy provides information about the species, identifies major threats to it and its habitat, and recommends strategies to conserve and recover the species. The strategy also identifies critical habitat (habitat necessary for the species' survival or recovery) for the species.

You are receiving this invitation because part of the proposed critical habitat for the Hine's Emerald may be located on or near your land. We are therefore seeking your input on the recovery strategy for this species.

We want to hear from you!

Landowners who have species at risk on or near their land have an important stewardship role to play with respect to these species. Having habitat for this species on or near your land suggests that you are currently managing it in a way that is helpful to this species. We encourage you to review and provide input on the recovery strategy to ensure your land continues to support this species.

You will find enclosed a summary of the recovery strategy. You can find the full recovery strategy and provide your comments by visiting the Species at Risk (SAR) public registry at <https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html> (click on *Consultations*). The public comment period is open until September 30, 2019. All comments will be considered and the final recovery strategy for this species will be available online at: https://wildlife-species.canada.ca/species-risk-registry/species/speciesDetails_e.cfm?sid=1145. If you would like to learn more about species at risk in Canada and what you can do to help them, please visit the SAR public registry (click on *Education Centre*).

**Hine's Emerald
(*Somatochlora hineana*)**



This large dragonfly is a globally rare species found throughout wetland habitats. It has many unique characteristics, including its emerald green eyes; its metallic green chest featuring yellow stripes on both sides; and its blackish-brown abdomen.

You can also provide feedback and request a hard copy of the proposed recovery strategy by contacting Environment and Climate Change Canada via e-mail: EC.EEPOntario-SAROntario.EC@canada.ca, or mail the Canadian Wildlife Service, Environment and Climate Change Canada: 4905 Dufferin Street, Toronto, ON M3H 5T4.

We appreciate your participation in this process.

Sincerely,



Lesley Dunn

Regional Director
Canadian Wildlife Service – Ontario
Environment and Climate Change Canada | Government of Canada
Lesley.Dunn@canada.ca | Tel: 416-739-5977 | Fax: 416-739-5845

Enclosure

- Summary of the proposed Recovery Strategy for the Hine's Emerald (*Somatochlora hineana*) in Canada



Summary of the proposed recovery strategy for the

HINE'S EMERALD

Under the *Species at Risk Act* (SARA), a recovery strategy must be developed for species listed as Extirpated, Endangered, or Threatened to help guide the actions needed to stop or reverse their decline.

The Government of Canada is adopting the Government of Ontario's Recovery Strategy for the Hine's Emerald with some additions. This document highlights the key sections of the recovery strategy.

Species Conservation Status

Endangered

Description and Distribution

The Hine's Emerald is a relatively large dragonfly with brilliant green eyes, a metallic green thorax with two lateral yellow stripes, and a blackish-brown abdomen.

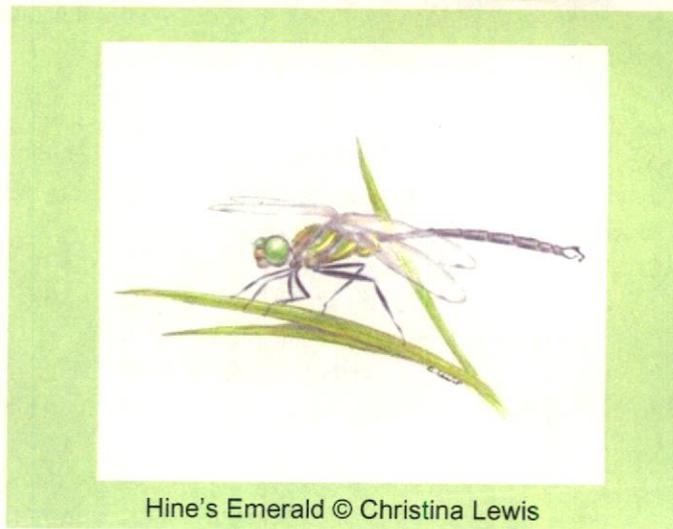
The existing global range of Hine's Emerald includes Ontario, Wisconsin, Michigan, Illinois and Missouri. In Ontario, Hine's Emerald is known from only a single site – the Minesing Wetlands in Simcoe County, west of Barrie.

Habitat Needs

The Hine's Emerald is found in wetland habitats including marshes and fens dominated by grasses and sedges. The habitat is primarily fed by groundwater from intermittent seeps. It also uses surrounding forests and fields, as well as openings along trails and roadsides.

Threats to the Species' Survival

- Alteration of water dynamics associated with residential development in upland areas and climate change;
- Invasive species (e.g. non-native Common Reed and Glossy Buckthorn);



Hine's Emerald © Christina Lewis

- Contamination of groundwater from road salt, agricultural runoff and urban contaminants;
- Road mortality; and
- Human-caused disturbance to habitat, such as trampling in sensitive areas.

Population and Distribution Objective

To maintain the persistence of the species and its habitat at existing sites in Canada.

Strategies to Help Meet Objectives

Strategies include activities such as:

- Undertake communications and outreach to increase public awareness of species at risk;
- Support conservation, agency, municipal and industry partners, and Indigenous communities and organizations to undertake activities to protect and recover Hine's Emerald;
- Maintain the quantity and quality of habitat and mitigate threats by developing best management practices to promote the protection of wetlands and upland groundwater infiltration and by controlling invasive plant species;

- Develop and implement a standardized monitoring program to assess changes in populations and habitat over time;
- Conduct surveys of suitable habitat to identify any additional populations.

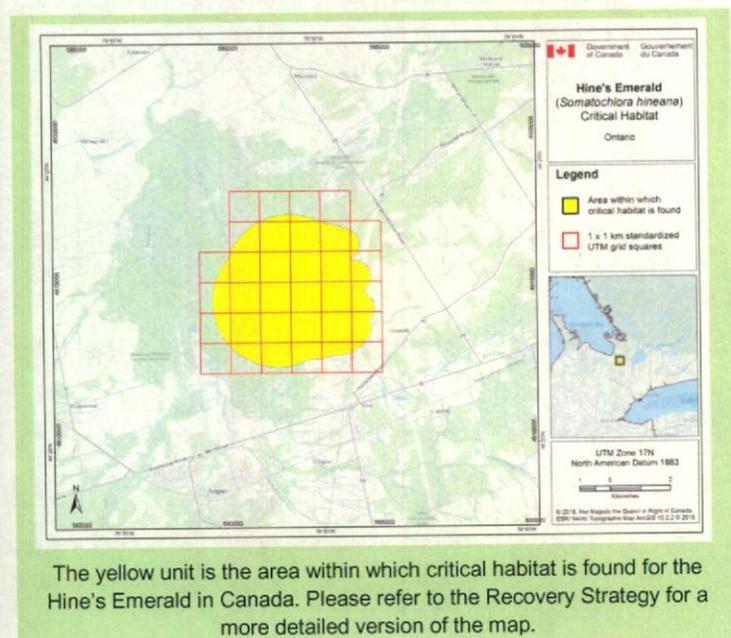
Critical Habitat

Critical habitat is the habitat identified in a recovery strategy or action plan that is necessary for the survival or recovery of a listed wildlife species. For a full description of critical habitat, please refer to the strategy.

Critical habitat refers to areas where Hine's Emerald are confirmed to be breeding and that possess characteristics that support its life cycle (i.e., foraging, mating, perching and roosting).

Critical habitat includes:

- The wetland, pond or other body of water with a known observation of Hine's Emerald; and
- The wetland, watercourse, pond or other body of water within 1,600 metres of the observation sites; and
- Any area that allows water to penetrate through it and that is within 500 metres of an area described above.



Activities likely to result in the destruction of critical habitat

These include (but are not limited to):

- Alteration of water dynamics (e.g. residential or agricultural development);
- Contamination of groundwater (e.g. large-scale agricultural activities or the use of road salt);
- Contamination from septic systems;
- Introduction of invasive species; and
- Human-caused disturbance to habitat (e.g. trampling from high levels of recreational activities).

How You Can Help

- Learn more about the Hine's Emerald, the threats to its survival and its habitat needs at <https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html>;
- Practice voluntary stewardship activities and best management practices, for example:
 - work in cooperation with Environment and Climate Change Canada and/or local conservation groups to conserve essential habitat; and
 - avoid activities that could harm the species or its habitat.
- Submit observation data to conservation data centres (e.g., the Ontario Natural Heritage Information Centre).

Cover photos:

Eastern Prairie-fringed Orchid © ECCC, photo: Gary Allen

Cerulean Warbler © ECCC, photo: Karl Egressy

Blanding's Turtle © ECCC, photo: Ryan M. Bolton

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Aussi disponible en français

For more information, please contact us directly at:

Environment and Climate Change Canada (ECCC) –
Canadian Wildlife Service, Ontario Region
4905 Dufferin Street, Toronto ON M3H 5T4
Fax: 416-739-5845 Phone: 416-739-4254
Email: EC.EEPOntario-SAROntario.EC@canada.ca

You can also visit the following website for more information:

Species at Risk Public Registry (www.sara.registry.gc.ca)

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