EXECUTIVE SUMMARY – Recovery strategy for the Eastern Prairie Fringed-orchid (*Platanthera leucophaea*) in Ontario

Prepared by the Eastern Prairie Fringed-orchid Recovery Team

The Eastern Prairie Fringed-orchid (*Platanthera leucophaea*) is a tall perennial orchid that has been documented in Canada at only 32 sites in Ontario, of which only 21 are believed to be extant. Many of these extant populations, however, are very small, and only a few are believed to be large enough to be viable. The Eastern Prairie Fringed-orchid is considered to be globally imperiled; it is rare and declining throughout its range in eastern North America. It is also listed as endangered on the Species at Risk in Ontario (SARO) List, as federally endangered in Canada by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and as federally threatened in the United States. Some of the largest global populations of this plant are found in Ontario.

The Eastern Prairie Fringed-orchid requires full sunlight and little competition from surrounding vegetation, circumneutral soils and moist conditions. At known sites in Ontario, it grows in a variety of microhabitats in three general areas: fens, tallgrass prairie and moist old fields.

The main threats to this species are habitat loss due to development and agriculture, competition from invasive species, modifications to drainage for agriculture or development, changes to nutrient regimes, damage by recreational vehicles, trampling by humans, successional change and herbivory (grazing by animals). Additional possible threats are hybridization and inbreeding due to small population sizes.

This orchid has always been relatively rare throughout its range and has highly specific habitat preferences. Therefore, the recovery goal for the Eastern Prairie Fringed-orchid is to prevent any loss of populations and habitat, to reverse the declining population trend at extant locations, to restore occurrences at historic sites where appropriate and to manage habitats for this species. The recovery objectives outlined to achieve this goal are as follows:

1. Protect Eastern Prairie Fringed-orchid populations, habitat and habitat functionality at all extant locations.
2. Report regularly on the status of this species, using the best available scientific information.
3. Reduce or eliminate threats at extant sites.
4. Conduct research on Canadian populations of this species to address knowledge gaps.
5. Restore habitat and reintroduce the Eastern Prairie Fringed-orchid where appropriate and feasible.

The report contains a table outlining the specific actions and performance measures needed to reach these goals and objectives.
It is recommended that areas with current or verified historic occurrences of the Eastern Prairie Fringed-orchid be considered in the development of a habitat regulation, that the habitat boundaries be delineated at a site-specific level on the basis of habitat descriptions provided in this strategy, and that the habitat regulation be written such that it is flexible enough to immediately protect newly discovered occurrences, using a similar, site-specific approach.