

Project and Work Plan Overview (Final)

This Bird Hazard to Aircraft Assessment work plan has been prepared to support the environmental assessment (EA) for the Ridge Landfill expansion and is based on the commitments made in the final amended Terms of Reference (ToR) for the EA that was approved by the Ministry of the Environment and Climate Change (MOECC) in May of 2018.

Waste Connections of Canada (Waste Connections) is proposing an expansion of the Ridge Landfill in order to continue to provide long-term residual disposal capacity for the company's large IC&I customer base and as a regional and inter-regional waste management facility to serve the projected increase in population and economic growth in southern and central Ontario.

The Ridge Landfill has been in operation since 1966 and was previously expanded in 1999. Waste Connections owns 340 hectares (ha) of land at the Ridge Landfill. The existing Landfill Site Area, which is permitted by an ECA from the MOECC for waste management and environmental work purposes, is 262 ha. The area within which waste disposal is permitted, called the Waste Fill Area, is 131 ha or half of the Landfill Site Area. As of December 2017, it is estimated that the existing Waste Fill Area at the Ridge Landfill site will provide waste disposal capacity until approximately 2021 at the current fill rate.

The current approved capacity for the Ridge Landfill is 21 million cubic metres (m³). The site is approved to accept a maximum of 1,300,000 tonnes of waste per year (the MOECC approved annual waste disposal rate). The EA does not propose to increase the maximum annual fill rate (this would remain as-is); however, Waste Connections is seeking the EA to increase the life of the facility for a 20 year planning period, from 2022-2041.

The waste being landfilled is approximately 98% IC&I waste and 2% residential waste. As part of the EA approval, Waste Connections would agree to reduce their IC&I service area from all of Ontario to just southern and central Ontario, and their residential service area from Chatham-Kent and the neighbouring counties of Essex, Lambton, Middlesex and Elgin, to only the Municipality of Chatham-Kent.

This Bird Hazard to Aircraft Assessment work plan outlines the tasks to support the evaluation of the level of risk that the project represents to aircraft safety once the preferred alternative method is determined. The following paragraphs provide a brief summary of the scope of the Bird Hazard to Aircraft Assessment work, including protocols and/or standards to be adhered to while work is undertaken.

The Bird Hazard to Aircraft Assessment will identify hazards posed by birds using the proposed landfill expansion, to aircraft using the Chatham Municipal Airport. Field surveys were conducted between September 2016 and April 2017 to gather data for this assessment. The objectives of the field surveys were as follows:

- to determine the current conditions at the site including the numbers and species of birds using the landfill and the effects of the bird control program as currently implemented;

- identify consistent flight lines and locations of roost sites for bird species that can be hazardous to aircraft (e.g. gulls, crows, vultures);
- identify other areas or habitats in the region that are important to or hold particular concentrations of potentially hazardous bird species; and
- quantify the level of aircraft traffic using the Chatham Municipal Airport; including types of aircraft, typical flight paths, traffic levels by time of day and any other information that might be relevant to assessing bird hazard.

Following the selection of the preferred landfill expansion alternative, the bird hazard assessment will be completed and recommendations will be made regarding any potential actions that may be required to mitigate the risk. This assessment will combine the results of the bird surveys, consideration of the aircraft use of the airport and the details of the proposed expansion to determine the hazard posed to aircraft by birds which may be attracted by the landfill.

For the purposes of the Bird Hazard Scope of Work, the study areas have been defined as follows:

- On-Site Study Area (“on-site”) – includes the property on which the current Ridge Landfill and proposed expansion is situated. The current use of this site by birds is a key predictor of future bird use after the expansion is complete; and,
- Off-site Study Area – encompasses the area within approximately 15 kilometres of the site. The area of interest for a bird hazard study extends well beyond the landfill property because birds may be attracted to the landfill from a wide area and the flight lines of birds are of primary concern to safety of aircraft. This study area was chosen to include night roosts of gulls on Lake Erie and crow roosts along the river in Chatham.

A summary of additional commitments for the Transportation assessment is provided below.

Commitment	Reference to applicable section in EA or supporting document
The potential risks to aviation and the bird management plan will be revisited as part of this current EA and will form part of the final recommendations of the aviation and bird hazard assessments presented in the EA.	Bird Hazard Work Plan section 3.1. This will also be summarized in the EA (section TBD).