

Memorandum

PDS-C 9-2024

Subject: Tree Planting at the Winger Road Closed Landfill Site

Date: February 7, 2024

To: Planning and Economic Development Committee

From: Susan McPetrie, Planner

The purpose of this memo is to provide Planning and Economic Development Committee with information on the planting of 3,996 native trees at Niagara Region's closed landfill on Winger Road in the Town of Fort Erie. This project was undertaken as part of the Niagara Region Greening Initiative, which aims to increase the region's vegetative cover.

Site Selection

As part of the Regional Greening Initiative, staff reviewed Regionally owned properties for potential tree planting opportunities. The closed landfill at 1750 Winger Road in Fort Erie was identified as a high potential planting site. The approximately 21 hectare property is bordered by Winger Road to the west and surrounded by treed areas to the north, east and south. There are also Provincially Significant Wetlands and a creek on the site. A map of the property is shown in Figure 1, below.

Used as a landfill by the Town of Fort Erie until the 1970s, Niagara Region Waste Management Services is now responsible for the maintenance of the site. Since assuming ownership in 1999, Niagara Region has completed extensive clean-up efforts to preserve the buffer between the creek and the waste area and has added a clay cap and topsoil to support vegetation.

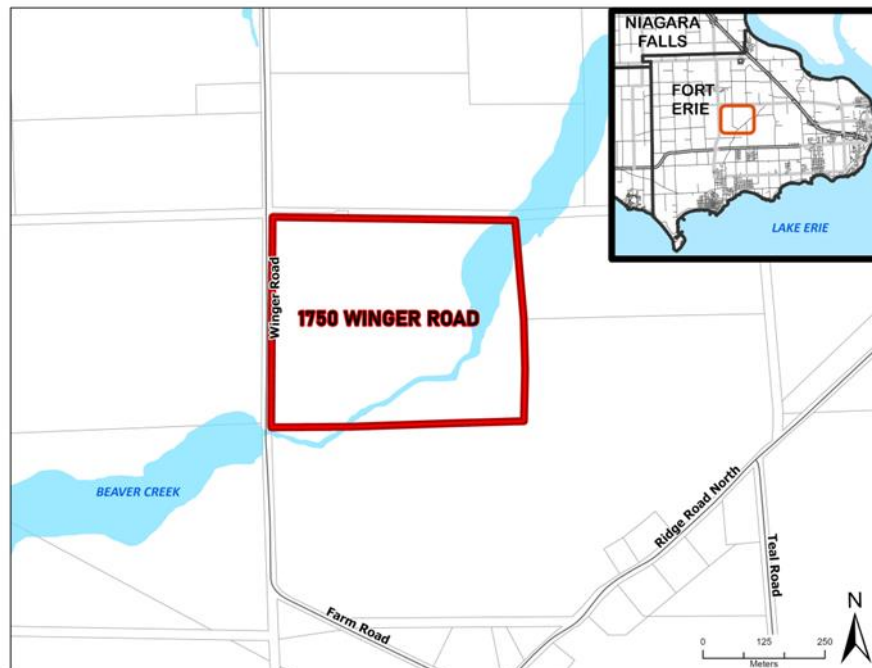


Figure 1: Map of Winger Road Closed Landfill Site

The primary goal of the tree planting project is to restore woodland vegetation to the site, which will, in turn, enhance connectivity with the surrounding woodlots, increase habitat and biodiversity on the site and help to protect the water quality of the creek. Increased tree canopy and vegetative cover also contributes to climate change mitigation through the absorption and storage of greenhouse gases.

Planting Partnership

In October of 2022, Regional staff successfully applied to Forests Ontario's 50 Million Tree Program through the Niagara Peninsula Conservation Authority (NPCA). The 50 Million Tree Program provides funding to private landowners and municipalities to support efforts to increase tree cover. The NPCA is a local planting partner for this program and is responsible for planning and implementing the tree planting project, as well contributing to a portion of the costs. Forests Ontario provided 35% of the project funding. The remaining costs were split between the NPCA (75%) and Niagara Region Waste Management Services (25%). The total project cost, including materials and labour, was \$17,914.11. Niagara Region's share was \$3,254.55.

Tree Planting

Tree planting on the Winger Road site took place on June 14 and 16, 2023. Prior to planting, the site was mowed to remove existing vegetation and reduce competition for

the seedlings. Using a combination of machine and hand planting methods, 3,996 deciduous and coniferous native trees were planted on 2.35 hectares of the property. The planting area is illustrated in Figure 2.



Figure 2: Planted Area on Winger Road Site

Tree species planted include:

- White Pine
- Red Oak
- Bur Oak
- Eastern Cottonwood
- Sycamore
- Trembling Aspen
- Silver Maple
- Red Maple
- Swamp White Oak

The trees planted were young, unbranched seedlings of approximately 0.5 – 1.0 metres in height and up to two years of age. Tree species were randomly mixed and planted in machine dug rows along the length of the site, from north to south, as shown in Figure 3.



Figure 3: Site after Tree Planting Completed

As shown in Figure 4 below, biodegradable mulch mats were installed around each tree to improve seedling survival by reducing weed competition and preserving soil moisture.



Figure 4: Seedling with Mulch Mat Installed

Regional and NPCA staff will continue to monitor this site to evaluate the success of the planting. This project will also be used to help inform other plantings that may occur through the Regional Greening Initiative (as detailed in PDS-C 44-2021).

The success of this project was due to the collaboration between Planning and Waste Management staff, the NPCA, and Forests Ontario.

Respectfully submitted and signed by

Susan McPetrie
Planner
Growth Strategy and Economic Development