

Ash Tree Removal and New Tree Replanting Project

Presented To:	Operations Committee
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Recommended by:	General Manager of Growth and Infrastructure

Report Summary

This report provides an update on the ongoing work being completed to remove and replant all known Ash trees located on municipal properties.

Resolution

THAT the City of Greater Sudbury directs staff to present a report in the first quarter of 2025 that provides an update on the removal of ash trees in the community and the anticipated schedule for replanting, as outlined in the report entitled “Ash Tree Removal and New Tree Replanting Project”, from the General Manager of Growth and Infrastructure, presented at the Operations Committee meeting of October 15, 2024.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

The project supports the Asset Management and Service Excellence and Climate Change strategic objectives as well as Goal 18: Increase the reforestation efforts of the Regreening Program of the Community Energy & Emissions Plan by supporting ecological sustainability and building climate resiliency through the reforestation of areas impacted by the Emerald Ash Borer within the urban areas of the community.

Financial Implications

The estimated cost to remove and replant all known Ash trees on municipal property is \$1,750,000. Of this, approximately \$1,200,000 is required for the removal and stumping of existing Ash trees. This work will be funded from the existing Tree Removal operating budget within Linear Infrastructure Services and will result in an over expenditure at year end. With this over expenditure, it is anticipated that the City will continue to project a net year-end surplus. Approximately \$550,000 is required for the replanting of trees throughout the community. A subsequent report will be brought forward in Q1 of 2025 which will provide information on how this phase of the project will be funded. An application has been made to the Federation of Canadian Municipalities for grant funding in the amount of \$875,000. If the City is successful, the grant funds will reduce the anticipated over expenditure at year end.

Background

Ash trees used to be a tree species that were suitable for urban planting in Greater Sudbury. They contributed to a healthy urban canopy, were integral to air quality, ecological health of soil and watersheds and were resistant to road maintenance activities (e.g. salt and sand application). Unfortunately, the Ash tree population in Greater Sudbury and large parts of North America have been decimated by the Emerald Ash Borer. The Emerald Ash Borer (EAB) is an invasive wood-boring beetle that attacks and kills Ash trees. According to the Invasive Species Centre, EAB was first detected near Detroit, Michigan and Windsor, Ontario in 2002, but has likely been in North America since the 1990s. The beetle has been rapidly spreading across North America since its arrival, posing a serious threat to all species of Ash. Up to 99% of Ash trees within a specific location are killed by EAB within 8-10 years of its establishment. EAB affects and eventually kills all ash species, including Green Ash and White Ash, that occur frequently in Greater Sudbury as street trees, in parks and private properties, and in rural areas. Black Ash, although a wetland species not planted as street trees, has succumbed to EAB to the point that it is now listed as 'Endangered' and protected by the Endangered Species Act. Figures 1 through 4 depict typical characteristics of the EAB infestation of Ash trees in Greater Sudbury.

Figure 1 – Typical Diseased Ash Tree



Figure 2 – Typical Dead Ash Tree



Figure 3 – Emerald Ash Borer and its Larvae

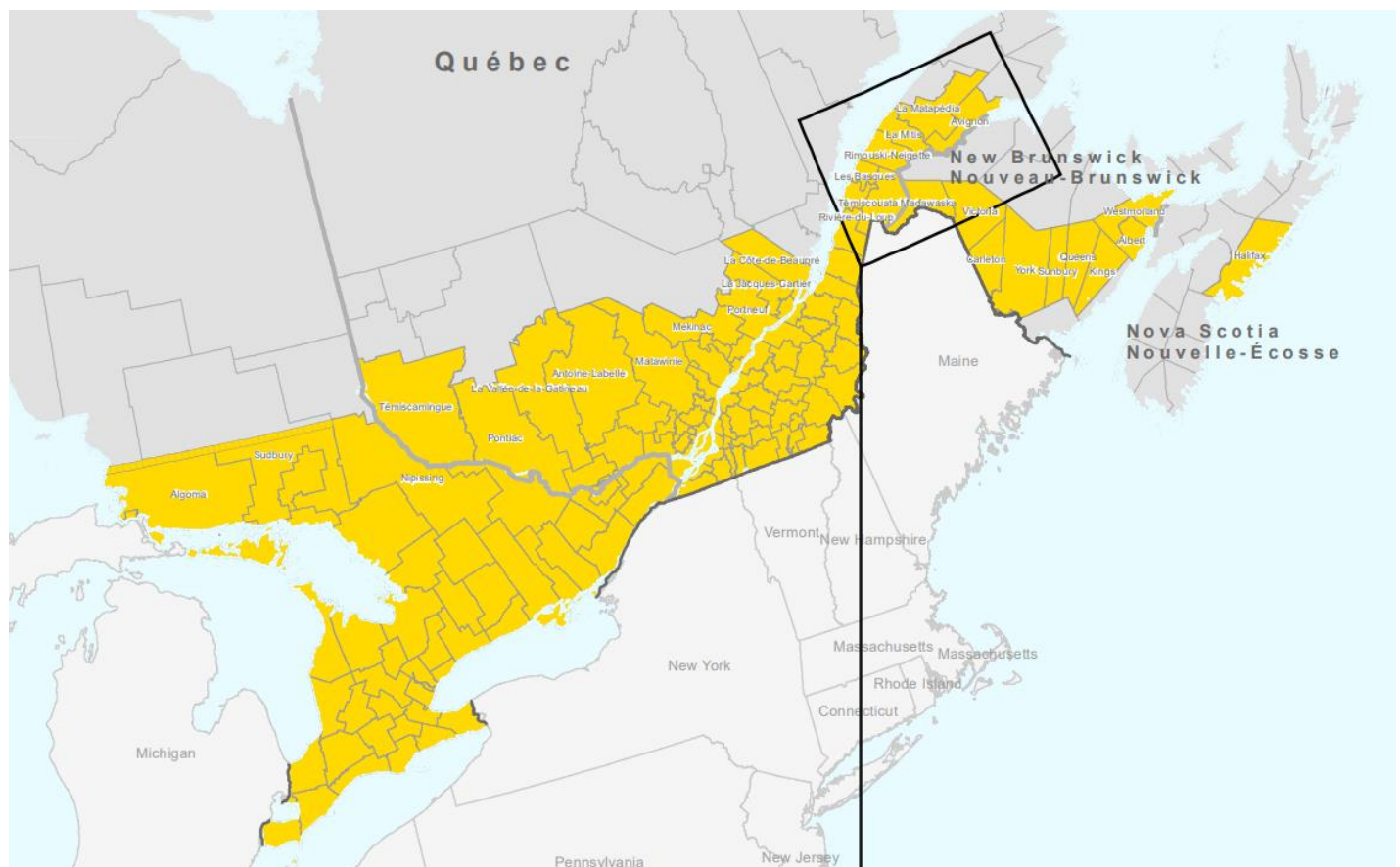


Figure 4 – Typical Ash Tree Trunk Damage



The Canadian Food Inspection Agency (CFIA) regulates the EAB infestation. The CFIA monitored the presence of EAB in Greater Sudbury from 2009 to 2013 and subsequently regulated the area on April 1, 2014. However, the CFIA never actually detected EAB in the Greater Sudbury area during its monitoring period. Rather, a decision was made to regulate the area at large due to EAB detection in other nearby communities. The federal regulatory measures strive to reduce human-mediated spread of EAB and contain their populations to infested areas. The regulations prohibit movement of Ash tree material and firewood outside the regulated area to mitigate the spread of the EAB. The highlighted area in Figure 5 depicts the regulated area in eastern Canada.

Figure 5 – EAB Regulated Area per Canadian Food Inspection Agency



Analysis

Trees in decline can become a hazard to people and property, especially when extreme weather events are experienced. This was evident during the 2018 and 2021 microbursts and several ice storms that caused hundreds of trees, many of them Ash trees, to fall and cause significant damage in the community. The City's Forestry section actively removes, plants and prunes trees as part of their daily activities. On average, Forestry staff remove 300 to 400 street trees annually and since 2022, staff have removed approximately 250 Ash trees. There are an estimated 1,000 Ash street trees remaining within the City that will require removal. Ash street trees in rural areas where they pose no risk of harm to people or risk of property damage will not be removed. There are also an approximate 500 additional diseased and dead Ash trees located on Sudbury Housing, Parks and Cemetery facilities that will require removal. Appendix A to this report contains a map showing the location of known Ash trees throughout the community.

A comprehensive plan was formulated to accelerate diseased and dead Ash street tree removals using existing budgets and resources. The plan had the Forestry section removing all Ash street trees by 2027 in a priority-based approach. The plan yielded flexibility to address other priorities that presented itself during the Ash tree removal program. Over the course of 2024, it became apparent to staff that the health of Ash trees in the community had declined more rapidly than was anticipated and an accelerated community wide response was required.

To assist with accelerating the Ash tree removal program, the City made application to the Federation of Canadian Municipalities (FCM) Growing Canada's Community Canopies (GCCC) grant on July 12, 2024. This federal grant's objective is to help municipalities grow their urban canopy. To facilitate this objective, qualifying projects could receive up to 50% of all eligible costs, up to a maximum of \$10 Million Dollars. Eligible costs include preparing a site to receive a new tree which includes removal of an existing diseased or dead tree. This grant is well aligned with two of the City's primary objectives as it relates to its urban canopy:

- Remove its diseased and dead Ash trees, as described in this report; and
- Grow its urban canopy, as described in the Urban Forestry Master Plan that is anticipated to be brought forward to the Operations Committee in Q4 of 2024.

The City's application to the FCM includes removal and replanting of approximately 1,500 diseased and dead Ash street trees and those found on Greater Sudbury Housing, Parks, and Cemetery facilities. Diversity of new trees planted is seen as an important factor in making the urban forest more resilient to environmental changes, diseases, and infestations. Therefore, it is the City's intent to plant 18 different species of new trees in place of the Ash trees removed. The application for funding was based on using a combination of contract and City resources.

The total project cost is estimated to be \$1.75 million, with \$1.2 million for tree removals and \$550,000 for replanting. It is possible the City will be awarded a maximum grant award of \$875,000 (50% of the total eligible cost). It is anticipated that the City will be advised if it is successful with its application as early as October 2024.

If the FCM funding application is successful, the project must be completed within a 3-year time frame. The key project milestones include completing all tree planting within the first two years of the project (2025 and 2026) and to utilize the third year (2027) for maintenance and monitoring of newly planted trees. The maintenance and monitoring period includes replanting trees that may not have survived during the initial planting period due to incompatible environmental conditions (ex. incompatible existing soil), poor initial tree health (ex. weakened trees received from suppliers), tree damage during handling and after-care (ex., damage that occurs during planting / lack of water after planting).

The removal of Ash trees will be funded from the existing Tree Removal operating account within Linear Infrastructure Services with the over expenditure forming part of the year end position. As the exact number of Ash trees to be removed and the removal and stumping schedule are unknown at this time, staff will bring forward an additional report in Q1 of 2025 updating the progress of the removal and stumping of trees and the anticipated replanting schedule.

Next Steps

It is expected that more than 90% of the tree removals will be completed by contract resources. To prepare for the need to remove diseased and dead Ash trees from the aforementioned City sites, an Ash tree removal tender was recently issued. The target completion date for the contract is set for December 31, 2024, with stump removal potentially extending into 2025.

New tree planting activities will be completed by City staff. On average, Forestry staff plant between 400 and 450 new trees each spring. A temporary upstaffing of Forestry staff will be initiated to be able to meet the needs of replanting approximately 1,500 new trees. The City's Tree Warden will oversee tree removals and new tree planting with support from other City service areas such as Parks, Cemeteries, Housing, Construction Services and the Strategic and Environmental Planning Section. Any future detection of Ash trees will be addressed through existing operational budgets. A subsequent report on the progress made in removing Ash trees and the anticipated schedule for the planting of new trees will be brought forward in Q1 of 2025.

Property owners are responsible for Ash trees on their private property which includes maintenance, treatment and removal as deemed necessary. Staff will implement an extensive public communication strategy that will include providing information to residents about the project. It will provide information to residents on how they can manage their own private trees that are in decline and how they can assist with growing the City's urban canopy. The City will use mediums such as the City website, social media, and public service announcements to communicate its plan. Residents that front a municipal Ash tree requiring removal will receive more specific instructions pertaining to the tree removal and new tree replanting plan.

Resources Cited

1. City of Greater Sudbury's Tree Maintenance Practices and Policies:
<https://www.greatersudbury.ca/live/my-property/tree-maintenance/>
2. Canadian Food Inspection Agency:
[Emerald Ash Borer - inspection.canada.ca](https://inspection.canada.ca/emerald-ash-borer)
3. Invasive Species Centre:
[Emerald Ash Borer - Profile | Invasive Species Centre](https://www.invasivespeciescentre.ca/emerald-ash-borer-profile)
4. FCM / GMF Funding Opportunity:
<https://greenmunicipalfund.ca/funding/tree-planting>