Staff Report



To General Committee

Subject Ice Storm Replanting and Recovery

Date June 11, 2025

Ward All

From K. Rankin, Manager of Parks and Forestry Operations

D. Friary, Director of Operations

Executive Member Approval B. Araniyasundaran, General Manager of Infrastructure

and Growth Management

CAO Approval M. Prowse, Chief Administrative Officer

Staff Report # OPR002-25

Recommendation(s):

1. That a new capital project for Ice Storm Replanting and Recovery be approved with a budget of \$3,766,200, to be funded from Tax Capital Reserve.

2. That two temporary contract positions, Urban Forester and Program Coordinator, that are fully recoverable from the Ice Storm Replanting and Recovery project, be approved.

Executive Summary:

The purpose of this staff report is to obtain funding and staffing support for the replacement of city trees lost to the ice storm on March 30, 2025. Replacement will include assessing where and what type of planting will have the greatest short- and long-term benefit for the city's urban canopy, removal of stumps, replanting of trees, watering and management and assessment of long-term impacts to the urban canopy across the city.

The Ice Storm on March 30, 2025 had a significant impact on the urban tree canopy in Barrie and surrounding areas. More than 5,000 street and park trees were lost due to damage caused by significant accumulation of ice, resulting in trees and branches falling onto roads, parks and into private property from city lands. As this represents over 10% of the city's street and park tree inventory, it had a significant detrimental impact on long-term tree canopy goals. Rapid replanting and care of these trees is required to ensure that future generations can achieve a long-term healthy urban tree canopy.

Trees lost to the ice storm will require replacement, resulting in a planting & recovery project that represents several times the normal annual program, workload and investment. The total project budget includes \$3M in replacement tree planting (including stump removal), a complete Forest Health Assessment of all natural areas (\$375K), and 2 contract (temporary) positions (Forester and a Program Coordinator) to administer the replacement project (\$431K) which includes supporting decision making for each location and tree species, be available to consult with affected residents and provide customer service, contract management and follow up tree care and plan and implement additional naturalization community planting projects in parks and natural areas.

Key Findings:

The March 30, 2025 Ice Storm resulted in the loss of over 5,000 street and park trees, and thousands more trees (yet determined) from the city owned forests. There was a significant impact on the urban canopy resulting in more than 10% of the city street and open space park trees being destroyed, with another 20% damaged. Many forested areas have large numbers of damaged or destroyed trees. Private properties have also seen high numbers of damaged or destroyed trees from the ice accumulation. The pre-ice storm canopy cover across the city was 30.5%, however we anticipate this to be reduced across the city, most notably within the northern Wards.

Replacement of 5,000 trees will require stump removal and planting, at an estimated cost of \$3M. Tree stumps will require stump grinding and removal to facilitate replanting in most locations. A normal year of tree removal and replacement is 600 to 800 trees, and the 2025 replanting program has already been scheduled and contracted. The additional 5,000 trees will require additional staffing support to manage the program, work with affected residents, develop replanting plans for natural area planting in forests heavily impacted by the ice storm and conduct location-by-location consultation. This will result in the replacement of lost trees as quickly and efficiently as possible.

The additional contract (non-complement) positions to assist with administration of the replanting & recovery project includes a contract Forester and a contract Forest Program Coordinator. Responsibilities of staff required to administer the project include inspecting tree locations, completing an analysis of tree species resiliency, recommending replacement species, marking locations, working with residents on tree selection and layout, contract administration, and follow-up tree care. Expanded planting services contracts may be required because of the number of trees being several times above normal contracted planting operations. In addition, the staff will be managing the process of forest health monitoring, reporting, and researching and submitting funding applications for planting projects to offset the project costs.

Financial Implications:

There are significant financial and staffing requirements to support the replanting and recovery from the ice storm. The bulk of the recovery costs are associated with tree planting, which will also require additional staffing supports to administer a successful project. In addition, the city's consulting firm that completes Forest Health Assessments has provided a cost to complete an assessment of the damage and provide recommendations related to recovery and specific locations for staff to monitor for other forest health issues (e.g. Spongy Moth).

The average cost of grinding a stump (existing contracted rates) is \$150. An estimated 5,000 stumps will need to be removed (ground out) in preparation for replanting resulting in an estimated total cost of \$750,000, plus a contingency of \$50,000. Stump grinding will start in 2025 and likely continue into 2026 due to the volume of work.

The cost for planting standard caliper (60mm) city trees on streets and in parks is an average of \$400 per tree, not including staff costs for administration of the project. Planting spread over 2 years is estimated to be a total of \$2M, plus a contingency of \$160,000. To administer the recovery project, two (2) additional temporary contract staff will be required, starting in October of 2025, through to the end of 2027. Approval of the recommended motion would provide approval of the Capital budget project for 2026 & 2027 and add funds to the 2025 Capital Budget to get started this year.

A summary of the total recovery project is as follows:

	2025	2026	2027	Total
Stump Grinding / Removal	\$400,000	\$400,000		\$800,000
Tree Planting		\$1,100,000	\$1,060,000	\$2,160,000
Forest Health Assessments	\$375,000			\$375,000
Temporary Contract Staff	\$45,000	\$183,700	\$202,500	\$431,200
Total	\$820,000	\$1,683,700	\$1,262,500	\$3,766,200

The Ecological Offsetting Fund is currently fully committed to existing programs (1,000 trees on the waterfront, Ecologist, young tree watering and maintenance program) and would not have the funds available to support the recovery project at this time. Available Federal and Provincial tree planting grants will be explored to offset planting costs.

Temporary Contract staff brought on to support the Municipality's response and recovery from the ice storm may be eligible for partial recovery from the Municipal Disaster Recovery Assistance (MDRA) Program as the work conducted would be for disaster-related work. Tree planting and canopy restoration costs are not eligible for assistance, as stated under the MDRA guidelines, however, appraisals and recovery cost estimates for municipal property and infrastructure may be eligible for partial reimbursement. Staff intend to submit claims for partial reimbursement of expenses related to the temporary positions and any reports/appraisals including the forest health assessments. The temporary contracted Forestry positions would also be responsible for searching out and applying for tree planting funding through grants and other sources.

Alternatives:

The following alternatives are available for consideration by General Committee:

Alternative #1 – General Committee could maintain the existing planting program funding and associated Operating budget without the additional Capital funding. (i.e. Status Quo) This alternative is not recommended as it would take at least 6 years to replant all of the trees lost in the ice storm, and result in an additional 6-year backlog of tree planting as the existing Operating budget would be allocated to replace trees lost in 2025.

Alternative #2 - General Committee could alter the proposed recommendation by directing staff to plant larger, more mature trees (i.e. 100mm caliper @ \$900-\$1,200 each). Although this alternative is available, the cost of replanting would increase by up to \$6M. Larger caliper trees also take longer to establish (regrow roots) and have a higher rate of transplant shock (increased percent of trees that die in the first 2 years). They are also in much lower supply, so there is unlikely to be enough mature stock available for all the planting locations.

Strategic Plan Alignment:

The recommendations in this staff report support the following goals identified in the 2022-2026 Strategic Plan:

Affordable Place to Live	X	Healthy, tree lined streets are more attractive to residents and businesses looking to move operations and employees to Barrie. Replacing lost trees will demonstrate that Barrie supports healthy neighbourhoods.
Community Safety	X	A neighbourhood with a healthy and complete urban streetscape has been shown in studies to be associated with reduced crime rates and reduced traffic speeds.
Thriving Community	X	Recovery of the trees and urban forests will increase the access to parks and recreation opportunities and support overall community wellness.
Infrastructure Investments	X	Increasing urban tree planting, increasing healthy urban canopies is a key goal in the City's climate action plans. Recovery from the ice storm is paramount to achieving the targets within the climate change strategy.
Responsible Governance	X	Temporary staff positions will support grant applications for funding support, finding efficiencies in tree planting and maintenance programs, review and implement more resilient tree species and planting locations for replacement trees, and support customer service through the recovery operations.

Additional Background Information and Analysis:

5,000 trees represent more than six (6) times the number of trees that die in a single year and are replaced in the normal tree planting program within the Operating Budget. In a normal year, 800 standard caliper trees are planted on streets and in parks, managed by a Forestry Program Coordinator (FT) and a Forestry Coop student (8-month position). The workload for existing staff would not support managing the successful replanting of this number of trees, or the after care and contract administration associated.

The recommendation is to use standard nursery stock sizes of trees (60mm caliper trees) due to availability and survival rates. Smaller trees (e.g. 30-40mm caliper) could be considered to reduce the overall planting cost (\$250 each), however additional care and structural pruning is required to ensure healthy, structurally sound trees in the future. Larger caliper trees cost significantly more (\$900 each) take longer to establish new roots, grow slower in the first few years, and have a higher mortality rate from transplant shock.

A successful program will require two additional (contract, non-complement) staff. Responsibilities of the contract staff will be to administer stump grinding, including liaising with the tree planting contractor for efficient planting timing after stump removal, make appropriate tree species selections, locations, administer contracts, work with residents, education and support of questions from homeowners, reviewing parks, forests and natural areas for present and future issues, water trees, fertilize trees, post planting care and pruning and overall tree management.

Consultation and Engagement:

While there was no public consultation required in relation to this staff report, there will be significant consultation with residents during the next two years of implementation of the recovery project. Public consultation will include but not be limited to public notices, discussing planting species, locations, scheduling, maintenance and follow-up for up to 5,000 planting locations across the city. Staff anticipate significant engagement with the community as we implement the recovery project.

Environmental and Climate Change Impact Matters:

Trees and forests provide many valued environmental benefits and services to the community including:

- a) Reduction in heat island effect resulting in lower energy consumption in the summer.
- b) Reduction in winter winds resulting in lower energy consumption in the winter.
- c) Sequestering greenhouse gases in trees.
- d) Stabilization of slopes and natural areas.
- e) Provision of wildlife habitat.

Not applicable

- f) Interception and absorption of rainfall and surface water flows, improving the water cycle.
- g) Support the overall climate resiliency and several of the goals within the Climate Change Adaption Strategy.

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Appendix:					
NA					
Report Autho	or:				
K. Rankin, Ma	anager (of Parks & F	Forestry Operations, Operation	ons Department	
File #:					

Pending #:		
Not Applicable		