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Town of Aurora

Committee of the Whole Report

No. OPS24-023

Subject: Aurora Forest Study Policy Updates

Prepared by: Matthew Volpintesta, Manager Parks and Fleet

Department: Operational Services

Date: November 5, 2024

Recommendation

1. That Report No. OPS24-023 be received; and
2. That staff be directed to review and propose updates to the Private Tree Protection By-Law (By-law No. 5850-16) and associated compensation policies.

Executive Summary

This report provides information on the recommendations in the Urban Forest Study that were endorsed in principle by Council in early 2024. It explores alignment with other policies and studies, feasibility of implementation, timelines, and future operational and capital budgetary implications where applicable.

- The Town's Urban Forest Study (2024) provided 36 recommendations and a Council recommendation to increase the Town canopy target to 40 per cent coverage by 2034.
- The Town actively manages the urban forest through several projects and programs, including invasive species management, tree planting and habitat enhancement through naturalization projects. This includes overseeing private tree protection, compensation and replacement, as well as development review.
- Staff recommend short-term and long-term policy updates to the Private Tree Protection By-Law, Tree Removal/Pruning and Compensation Policy, and boulevard tree planting and maintenance practices.
- Town staff will seek feedback and incorporate recommendations from the community and partners including conservation authorities through Engage Aurora.

- Town staff will review operational budget and staff capacity with a three-to five-year outlook, and beyond, to ensure resources are available to support implementation of the priority recommendations.

Background

The Town's Urban Forest Study (2024) provided 36 recommendations and a Council recommendation to increase the Town canopy target to 40 per cent coverage by 2034.

The 2024 Urban Forest study, prepared by the Toronto and Region Conservation Authority (TRCA), outlines 36 recommendations, categorized into three priority levels. Approved by Council on February 6, 2024, the Study includes a motion to target canopy cover by 2035 (Recommendation #2, Aurora Urban Forest Study 2024). Aurora's urban forest holds an ecological, social and financial value, with a replacement value of \$66.4 million in 2024 as identified within the 2024 Natural Capital Asset Management Plan. The 2024 update to the Urban Forest Study was the second iteration of the data collected first in 2013 which served as a baseline. To track progress, study partners committed to conducting sample-based field surveys, done over a ten-year period. Quantify current species composition, size and condition of Aurora's Forest.

To meet or exceed the 40 per cent canopy cover target proposed by 2034, staff are in alignment with each of the endorsed recommendations. Of the 36 recommendations, the following are high priority, targeted for implementation within a three-to-five-year window.

- As part of an update to the Town's Urban Forest Management Plan, the Town will review and update its urban forest policies such as landscape design standards, tree compensation policies, and addressing canopy targets, species diversity, forest health, invasive species soil conservation, and climate resilience.
- Continue to tree planting, pruning and replacement across municipal properties. Evaluate planting and maintenance budgets regularly as the Town grows and assumes responsibility for new roads, parks, and facilities.
- Maintain a diverse tree population in intensively managed urban areas. Set a long-term goal for no single species to make up more than 5 per cent, no genus more than 10 per cent and no family more than 20 per cent of the tree populations, both town-wide and in each neighbourhood.

- Utilize native and appropriate non-native, non-invasive planting stock, increasing genetic diversity of tree populations following Ontario Tree Seed Transfer Policy. Consider integrating seed zone contract requirements to ensure planting stock are selected from appropriate seed zones tolerant of the Town's soil characteristics.
- Continue to promote the proportion of large, mature trees across Aurora's Urban Forest through enforcement of the Private Tree Protection By-law and Tree Removal/Pruning Compensation Policy.
- Target removal of high priority invasive plant species at high priority sites following best practices.
- Revise the "Tree Planting and Approved Plant List" to remove both Japanese tree lilac and callery pear from the ornamental tree list due to the invasive potential of these species.
- Develop a monitoring and action strategy for invasive species, including pests and diseases, and continue taking proactive approaches to address new and emerging invasive species, such as hemlock woolly adelgid and oak wilt.
- Continue assessing forest structure, function, and distribution every 10 years through the Urban Forest Studies.
- Develop a post-tree planting management and monitoring strategy to complement the tree maintenance program to ensure tree survivorship and mitigate common stressors in the urban environment.
- Assess the Town's current recommended planting list based on the climate vulnerability of each species. Shift recommendations to native and appropriate non-native, non-invasive species that have a higher tolerance and lower vulnerability to climate change impacts.
- Begin to integrate green infrastructure into asset management planning, particularly for street trees and other municipal natural assets like woodlands and wetlands.

Analysis

The Town actively manages the urban forest through several projects and programs, including invasive species management, tree planting and habitat enhancement through naturalization projects. This includes overseeing private tree protection, compensation and replacement, as well as development review.

The Town supports the health of Aurora's urban forest through both its operating and capital budgets, along with partnerships with environmental groups and conservation authorities. Annual initiatives include planting events, naturalization projects and invasive species removal.

As part of our ongoing commitment to the natural environment, staff are continuously looking for opportunities to further naturalize existing parkland. In 2024, the Town partnered with LEAF to plant over 1,000 trees and with the Lake Simcoe Region Conservation Authority (LSRCA) for the Hamilton Park wetland project, adding another 1,000 species of trees and shrubs. Naturalizing parkland reduces mowing needs and improves ecological health. Through our partnerships with the Aurora Arboretum, Ontario Heritage Trust, Case woodlot Guardians, school groups, and our Adopt-a-Park program, the Town is actively working to educate, transform greenspaces and mitigate invasive species such as European buckthorn, phragmites, and garlic mustard. The David Tomlinson Nature Reserve is another successful example of naturalization and habitat enhancement with a focus natural ecology.

Street and park trees are maintained on a 7-year cycle, with regular pruning and replacement of dead or dying trees tracked through the Town's annual tree inventory. The same is true for trees found in parks, within trails and natural heritage systems and Town facilities. Disease, pest, and invasive mitigation impacting Town-owned trees are currently managed through the annual operating budget.

Each of these above-mentioned projects are funded through our capital and operating budgets and play an important role in reaching a 35 per cent canopy cover in Aurora. The Town also actively pursues grants and funding programs which support natural ecology restoration, plantings, and invasives removal.

Staff recommend short-term and long-term policy updates to the Private Tree Protection By-Law, Tree Removal/Pruning and Compensation Policy, and the boulevard tree planting and maintenance practices.

A key practice in which the Town ensures that the urban forest is protected, maintained and expanded, is through the Private Tree Protection By-Law, and Tree Removal/Pruning

and Compensation Policy. Highlighted as a priority recommendation within the 2024 Urban Forest Study, updating these policies is a first and significant step toward achieving our canopy cover targets.

Staff propose returning to Council with a report in 2025 outlining options and policy updates to both the Private Tree Protection By-Law and Tree Removal and Compensation policies following a best practice review of municipal policies and gathering community feedback. Staff will seek to enhance measures which will more greatly protect our urban forest, including consideration of lowering the tree removal threshold which triggers a permit and compensation, to one tree, and considerations around trunk size which require a permit and or compensation. This also would include a review of fees to remove trees and ensuring that charges align with regional and provincial municipal counterparts.

In 2025, staff will also present programming and policy updates on invasive species management, and landscaping treatments through development review. This will include revising the landscape design guidelines, which focus on tree planting best-practices, design, consideration of soil volume, watering regime, species selection, and spacing within boulevard treatment.

A revised planting list is already being implemented in consultation with TRCA, LSRCA, and LEAF as part of ongoing projects and development reviews.

Town staff will seek feedback and incorporate recommendations from the community and partners including conservation authorities through Engage Aurora.

As part of the Best Practices Review and planned 2025 report with recommended updates to the Private Tree Protection By-Law, and Tree Removal/Pruning and Compensation Policy, staff will use Engage Aurora to seek feedback from the community, development industry, and partner organizations to ensure all perspectives and expert opinions are considered.

Town staff will review operational budget and staff capacity with a three-to five-year outlook, and beyond, to ensure resources are available to support implementation of the priority recommendations.

To support the updated Private Tree Protection By-Law, and Tree Removal/Pruning and Compensation Policy, staff propose reviewing the Town's capacity to implement these changes. More specifically, this includes reviewing operational budget needs to ensure funding is keeping pace with canopy growth whilst private and public trees mature as it relates to arboriculture practices, contracted works, replacement plantings and pruning.

To facilitate this work, including maintenance of Town-owned trees, considerations should be made around enhancements to labour force, potentially seeking to input a new or modified staff position which focuses primarily on development review from both a forestry and landscape architecture lens, as well as management of Town-owned tree inventory.

Advisory Committee Review

Environmental Advisory Committee – Oct 21, 2024:

This report detailing the proposed updates and recommended action plan was met with excitement by the committee, with several questions and recommendations for the work being proposed. Discussion began surrounding the timing of the proposed update, being spring 2025. The committee made clear, the importance of ensuring the implementation of tangible performance indicators going forward, such as benchmarking total number of removal permits, and total number of trees planted through compensation. Further, discussion included a recommendation to increase permitting and compensation fees, to deter removals and to recoup costs in alignment with the natural capital asset value, as well as increasing the replacement tree ratios and reducing the minimum required DBH for tree removals. The committee made clear that of the 36 recommendations, the lesser priority targets are not lost and should be explored once the initial goals of the By-law and Policy updates are met. There were also questions around Emerald Ash Borer management, active natural enhancement projects, updates to the landscape design guidelines, plans to incentivise private landowners, and encouragement of partnerships with not-for-profit groups to participate in collaborative planting events.

Legal Considerations

Forests are valuable resources that provide environmental, economic and social benefits, and their mismanagement can lead to environmental degradation. An effective Private Tree Protection By-law will assist with ensuring compliance with legal requirements, safeguarding environmental and community health, and reducing liability related to property damage or ecological harm. As stated above, staff will bring a further report to Council with recommendations on updating the existing Private Tree Protection By-law. Once the recommendations are approved by Council, a By-law will be brought forward to Council for enactment.

Financial Implications

The Town's recently approved Natural Capital Asset Management, and 10-year capital plans provide resources in support of the Town's delivery of the Urban Forecast Study's recommendations.

The anticipated financial implications that may result from the above-noted policy reviews are difficult to estimate at this time; however, staff will speak to any resultant financial implications as each updated policy is presented to Council for its review and approval.

Communications Considerations

To inform the public, this report will be posted on the Town's website. Further, through the process to consult on proposed updates to the By-Laws and policies described throughout this report, staff will utilize the Engage Aurora website as well as social and digital channels to seek formal comment and feedback. Communications will continue to work with Parks to inform the public about Aurora's ongoing tree conservation efforts.

Climate Change Considerations

The recommendations from this report will result in the mitigation of long-term effects to Aurora's urban canopy, an important carbon sink. The result of protecting the tree canopy on community greenhouse gas emissions are not precisely measurable due to the complex nature of carbon sequestration. In addition, the recommendations from this report will increase the Town's ability to adapt to a changing climate by decreasing additional stressors to support tree health. With rising temperature trends, windstorms and storm intensity, it's more important than ever for the Town to protect and restore the Town's natural heritage, as these changes could cause increased stress on trees. Trees play an important role in mitigating the impacts of a changing climate, from air quality, stormwater management to counteracting the effects of the heat island. The report supports the goals within Aurora urban forest policies and bylaws by protecting the Town's natural heritage and will only assist in strengthening urban forest policies and cultural practices for the future. This includes supporting the Blue Dot Movement, Corporate Environmental Action Plan, Climate Change Adaption Plan, and Community Energy Plan.

Link to Strategic Plan

The second iteration of the Urban Forest Study supports the Strategic Plan Goal of Supporting an Exceptional Quality of Life for All, by encouraging an active and healthy lifestyle.

Develop a long-term needs assessment for recreation programs, services and operations to match the evolving needs of the growing and changing population.

Alternative(s) to the Recommendation

1. Council to provide alternative recommendation(s).

Conclusions

To meet a 40 per cent canopy target by 2034, the recommendations within the 2023 Urban Forest Study should be strategically implemented, with appropriate resources over the next 5 to 10 years secured to ensure staff are equipped to support our forest through various recommendations and measures. As such staff are recommending an update to the Private Tree Protection By-Law, and Tree Removal/Pruning and Compensation Policy, as well as proposed updates to the boulevard tree planting and maintenance practices, which will be detailed in a future report to Council.

Attachments

None.

Previous Reports

OPS24-001, Urban Forest Study Update, February 6, 2024

PR14-035, Urban Forest Study (UFORE) – July 29, 2014

PR15-026, Urban Forest Management Plan & Policies – November 17, 2015

OPS20-013, Review of Urban Forest Study & Associated Forestry Policies – September 8, 2020

Pre-submission Review

Agenda Management Team review on October 17, 2024

Approvals

Approved by Sara Tienkamp, Director, Operational Services

Approved by Doug Nadorozny, Chief Administrative Officer