



DRAFT Corporate Policy

(December 22, 2021)

Environment

Tree Protection and Canopy Enhancement Policy

Approved by Council on: TBD

Report Number: TBD

Effective: TBD

Reviewed on:

Amended:

Next Review:

Note:

Purpose:

To provide direction regarding tree protection, maintenance, and canopy enhancement practices across the City, in order to support the growth of the urban forest and to achieve a canopy cover target of 35 percent by 2041.

Scope:

This policy applies to all city owned lands and projects, as well as to private properties and developments within the urban boundary of the City.

This policy does not apply to treed areas within key Natural Heritage Features subject to the City's and Region's Natural Heritage System policies.

Background:

This policy recognizes the numerous benefits and services that the City's urban forest provides, including contributing to climate change mitigation and adaptation, and being central to sustaining Burlington as a prosperous, liveable and healthy community.

This policy also recognizes four (4) categories of activities related to trees that need to be undertaken to have a healthy and sustainable urban forest:

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1. Preserve and Protect
2. Maintain and Monitor
3. Establish, Replace and Enhance
4. Engage and Collaborate

The following policy statements are organized into these four (4) categories, but are intended to be considered in an integrated manner to provide overarching guidance for all tree-related activities in the City. No one category is considered more important than another; rather, attention to and investment in all four (4) categories is required to sustain a healthy urban forest over the long term.

Strategic and sustained investment will be key to the appropriate management of tree-related opportunities and challenges as they arise and evolve. Trees and by association, urban forests, have tremendous capacity to provide increasing benefits and services to the community as they mature. They are, however, also vulnerable to environmental stressors such as tree pests and pathogens, extreme weather due to climate change, and anthropogenic stressors (such as exposure to chemicals).

Ensuring the sustainability of the City's urban forest means implementing a range of strategies to keep the trees as healthy as possible and maximize their resilience in the face of these stressors.

Notably, the City of Burlington only owns about 15% of the land base in the municipality. Consequently, the majority of the existing tree canopy and most of the opportunities for expanding the urban forest exist outside lands owned by the City. Therefore, this policy provides high-level guidance for what the City can, and should, be doing on its own lands, and also includes guidance for urban forest protection and enhancement on lands not owned by the City.

Similarly, it is also important to recognize that the City is part of a two-tiered municipality and management of woodlands 0.5 hectares or greater is done so under the authority of the Region of Halton. Regional policies are applicable to these features and should be reviewed for protection, enhancement and management implications.

Policy Statement:

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Preserve and Protect

- The City shall support the preservation of trees by:
 - exploring all feasible options for retaining a viable tree before deciding to remove it;
 - requiring that opportunities to preserve trees are considered through the development process for public and private lands;
 - requiring special consideration for significant trees;
 - generally refusing requests for tree removal based solely on reasons related to aesthetics or other similar factors;
 - for trees that are to be preserved, requiring the implementation of tree protection measures consistent with the City's standards and specifications; and
 - ensuring the City's tree protection standards and specifications are aligned with applicable best practices.
- The City recognizes that urban forest protection is a shared responsibility and shall work with proponents and/or partners to:
 - find pragmatic and progressive approaches for preserving trees in place;
 - apply appropriate tree protection measures on projects adjacent to trees, including those undertaken by the City;
 - ensure tree protection measures are being implemented by all contractors, partners and proponents; and
 - conduct a comprehensive review and revision of standards, specifications and guidelines related to tree preservation to ensure alignment with advancements to industry best practices.

Maintain and Monitor

- The City recognizes the urban forest as a valued natural capital asset and key component of the City's green infrastructure.
- The City shall:
 - invest in the establishment and maintenance of the urban forest on its lands in accordance with applicable best practices;
 - provide guidance to private property owners with respect to current trends in urban forest health and best management practices
 - maintain a digital inventory and condition assessment of trees on public property;

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- measure and track the status of the City's tree canopy and other selected measures to inform planning and management approaches; and
 - adopt an adaptive management approach to be able to revisit approaches and respond to changing conditions and/or events as needed.
- The City shall prioritize proactive maintenance and undertake regular risk management (including pest management as needed) to keep its urban forest assets in good condition and build the asset's resilience to stressors, including climate change.

Establish, Replace and Enhance

- The City shall support proper tree establishment by:
 - planting and maintaining trees on public property;
 - directing the planting and initial maintenance of trees on lands to be assumed by the City through the property development process;
 - supporting tree planting initiatives of all scales on public and private properties with volunteers and partners as opportunities arise;
 - undertaking or directing tree planting and young tree maintenance in accordance with applicable best practice;
 - encouraging the eradication of invasive, non-native trees, shrubs and herbaceous plants, where appropriate to promote ecological restoration; and
 - ensuring the City's standards are aligned with applicable best management practices, including provision of sufficient access to adequate volumes of good quality soils to promote longevity.
- The City shall work to ensure the urban forest and tree canopy are sustained and enhanced by:
 - implementing a plan for replacement where trees are removed on public and private lands;
 - provide adequate space and suitable conditions above and below grade for planting and growth of trees on public and private property;
 - supporting the relocation of relatively small, healthy trees where *in situ* protection is not feasible;
 - requiring the integration of tree establishment areas in parking lots and other impervious areas through Landscape Areas in the Zoning By-law;

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- requiring tree replacement wherever healthy trees are approved for removal in accordance with approved City standards; and
- encouraging tree replacement on-site but evaluating the possibilities for off-site tree replacements, in part or in whole, where the compensation cannot be accommodated on site and where feasible alternative locations are identified.
- The City shall seek to improve equitable access of urban forest services to vulnerable populations through the long-term planning of tree establishment programs.
- The City shall work to enhance the structural, functional and genetic diversity of the urban forest to build resilience to climate change and other stressors by:
 - requiring diversification at different geographic scales (e.g., street level, site level, neighbourhood, ward level);
 - diversifying between and within species (i.e., with different provenances);
 - considering tree species for future climate conditions;
 - carefully including assisted migration (i.e., incorporating some species with ranges just south of Burlington) as part of overall species diversification efforts in a limited way; and
 - excluding invasive species and species known to hybridize with other species native to Halton Region.

Engage and Collaborate

- The City shall build knowledge and a tree-friendly culture internally through inter-departmental coordination and consideration of opportunities and constraints related to trees, in consultation with Forestry staff.
- The City's Forestry staff shall gain and share knowledge through various mechanisms including partnerships with other municipal and agency Foresters and ongoing professional development.
- The City shall share information and resources related to the urban forest on its website and through other means, as identified in the Urban Forest Master Plan.

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- The City shall actively pursue opportunities to engage with members of the community and external partners to promote proper tree establishment and care, including use of incentives as appropriate.
- The City shall collaborate with existing and new partners to increase its capacity to establish and enhance the urban forest on public and private lands.
- The City is committed to employing communication methods and tools that are transparent, and to providing accurate information in a clear and concise manner that is also accessible.

Definitions:

For the purpose of this policy, unless otherwise stated, the following definitions shall apply:

Term	Definition
Functional Diversity***	This aspect of diversity is based on traits that determine where trees can thrive and how they interact with other species. A functional trait is any feature that can affect a tree's performance, and can be a physical trait (e.g., branching or rooting patterns), a physiological trait (e.g., tolerance to shade or drought) or a phenological trait (e.g., time of flowering or budbreak).
Genetic Diversity***	In relation to trees, this refers to diversity within a species. Many tree species have relatively large geographic ranges, but can develop intra-species adaptations based on being in a certain geographic area over time. This is referred to as a "provenance". For trees, provenance is site-specific and typically represented by a local stand of trees.
Green Infrastructure*	Natural and human-made elements that provide ecological and hydrological functions and processes. Green infrastructure can include components such as natural heritage features and systems, parklands, storm water management systems, street trees, urban forests, natural channels, Low Impact Development designs including but not limited to permeable surfaces and green roofs.
Municipal Natural Asset**	The stocks of natural resources or ecosystems that contribute to the provision of one or more services required for the health, well-being, and long-term sustainability of a community and its residents.
Public Property	Any land or property owned by the City.

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Term	Definition
Private Property	Any land or property not owned by the City within the urban boundary.
Significant Tree	A healthy tree 75 cm in diameter or greater measured at 1.37 metres above the ground.
Stressors	Can be biotic or abiotic which have the ability to affect overall tree health and structural conditions.
Species Diversity	In relation to the urban forest, the number of different tree species. Can be measured at different scales from site-specific or a single street, to across a neighbourhood or ward, or City-wide.
Tree	Woody vegetation, which at maturity, will reach of height of at least 4.5 metres.
Tree Canopy	The layer of tree leaves, branches, and stems that provide tree coverage of the ground when viewed from above.
Urban Forest*	All trees and associated woody vegetation (e.g. shrubs), within the city. This includes trees in natural areas, as well as trees in more manicured settings such as parks, yards and boulevards. In the City of Burlington, the urban forest encompasses trees in the Urban and Rural Areas and in North Aldershot, but is called the "urban" forest because this is the convention that has developed.

* cited from the City's Official Plan

** cited from *Defining and Scoping Municipal Natural Assets* (Municipal Natural Assets Initiative, 2017)

*** adapted from *Peel Region Urban Forest Best Practice Guide 5: Working with Trees: Best Practices for a Resilient Future* (Peel Region and Partners, 2021)

References:

- Burlington's Strategic Plan 2015 - 2040
- The City's Official Plan 2020
- City of Burlington Site Alteration Bylaws (64-2014 and 52-2018)
- City of Burlington Public Tree Bylaw 68-2013
- City of Burlington Private Tree Bylaw 02-2020
- The Region of Halton Tree (Woodland) Bylaw 121-05
- City of Burlington Urban Forest Master Plan (Update in Progress)
- City of Burlington Standard Specifications for Tree Protection and Preservation 2020 (as amended)
- City of Burlington Site Plan Guidelines (Update in Progress)

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Roles:

Accountable:

Director of Roads, Parks and Forestry

Responsible:

Manager of Urban Forestry