

# Town of Halton Hills **Privately-Owned Tree Management Strategy** Background Report



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## Attachments

- Attachment 1 Tree Canopy Mapping
- Attachment 2 Tree Canopy Private-Public Ownership Mapping

## 1.0 Introduction

This background report is a component of the Halton Hills Privately-Owned Tree Management Strategy.

In 2019, the Town of Halton Hills joined hundreds of municipalities across Canada in declaring a climate emergency. Climate change is already impacting many aspects of life in Halton Hills, from public health to infrastructure to transportation and energy systems to biodiversity. Maintaining and enhancing a healthy tree canopy is a community-wide action to mitigate the effects of climate change and contributes to meeting the Town's target to become a net-zero community by 2030.

Approximately 83% of the Town of Halton Hills tree canopy cover is located on privately-owned lands. Individual residents, businesses, and landowners have a large stake in a shared natural asset that provides ecosystem services and well-being to the entire community. While managing the overall tree canopy is a joint effort across all Town departments, Halton Region and Conservation Authorities working together, management of the largest component of the tree canopy relies on the actions of residents, businesses, and landowners.

This background report explores:

- existing legislation that enables the Town to manage trees on privately-owned land;
- identifies existing education and incentive programs available to private landowners in Halton Hills, and
- establishes the Town's existing tree canopy cover.



Figure 1. Downtown Acton

## 2.0 Existing Legislation

Provincial acts, regulations, and policies provide direction, both directly and indirectly, to the requirement to consider trees, as well as the municipal regulation and management of trees.



Figure 2. Enabling Provincial Legislation contributing to managing privately-owned trees.

## 2.1 Planning Act, 1990

The purpose of the Planning Act is to promote sustainable economic development while ensuring a healthy natural environment within the bounds of the policy and the means provided by the Act. The Act establishes a framework for municipalities to develop official plans, regulate development, and integrate provincial interest and the provincial land use planning systems in planning decisions. Matters of provincial interest, as they apply to urban tree management, include the protection of ecological systems, the appropriate location of growth and development, conditions to the approval of plans that require the provision of trees and shrubs, and the requirement that municipal official plans must, at minimum, conform to the appropriate regional official plan.

If the Town of Halton Hills were to consider enacting a private Tree By-law, it must be complementary to other legislation and work in conjunction with the Planning Act to protect trees resources. Any Private Tree By-law enacted by the Town does not apply to the approval of a site plan, a plan of subdivision or consent under Sections 41, 51 or 53 respectively of the Planning Act, or a development permit under Section 70.2 of the Planning Act, as these are exempted from any municipal enacted Private Tree By-law legislation. These types of applications require a review of tree resources as part of the approval process, ensuring protection of trees through the land use planning process. Once these Planning Act approval processes have identified the tree resources on a particular site and how they will be protected, a Private Tree By-law would then regulate these trees post-development.

## 2.2 Provincial Policy Statement, 2020

The Provincial Policy Statement is the companion guidance document for the provincial planning act, it guides and identifies specifics of appropriate land use planning. The provincial policy statement includes guidance around the protection of significant woodlands to ensure that natural features and areas are protected for the long term. Development and site alteration are not permitted in significant woodlands, wetlands, valleylands, wildlife habitat or Provincially Significant Areas of Natural and Scientific Interest (ANSIs), and adjacent lands, unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. The Provincial Policy Statement additionally identifies that planning authorities should promote green infrastructure and designs and orientation which maximize energy efficiency and conservation, and the consideration of the mitigative effects of vegetation and green infrastructure. It also encourages settlement areas to maximize vegetation where feasible.



## 2.3 Growth Plan for the Greater Golden Horseshoe (A Place to Grow), Ontario Regulation 311/06, 2019

The Growth Plan for the Greater Golden Horseshoe (A Place to Grow) guiding principles includes supporting the achievement of complete communities. prioritizing intensification in strategic growth areas, improving integration of land use planning, and providing approaches to managing growth that recognizes the diversity of communities in the Growth Plan. The Growth Plan for the Greater Golden Horseshoe defines green infrastructure as natural and human-made elements that provide ecological and hydrologic functions and processes, including natural heritage features and systems, parklands, and urban forests. The Growth Plan for the Greater Golden Horseshoe identifies that upper and single-tier municipalities will develop policies in their official plans to identify actions that will address climate change, including incorporation of appropriate green infrastructure and low impact development. It also identifies that municipalities are encouraged to establish an open space system within settlement areas, including, but not limited to, opportunities for public parks and communal courtyards. The plan also encourages municipalities to identify and enhance natural heritage features, and where possible, increase linkage functions.



## 2.4 Niagara Escarpment Planning and Development Act, 1990

The Niagara Escarpment Planning and Development Act's purpose is to maintain the Niagara Escarpment as a landscape level system of interconnected natural areas and features of a continuous natural environment and to ensure development which occurs is compatible with the natural environment. The Niagara Escarpment Plan (2017) prevails over all local plans or zoning by-laws where a conflict arises between them; as a result, the Town of Halton Hills Official Plan was prepared in accordance with the policies of the Niagara Escarpment Plan, meeting or exceeding the restrictions outlined in the Plan. The Niagara Escarpment Plan's objectives include the protection of unique ecologic areas, maintaining and enhancing the character of natural water features, providing adequate outdoor recreation opportunities, preserving natural scenery, ensuring all new development is compatible with the purposes of the act, and supporting municipalities within the Niagara Escarpment Plan planning area in the planning functions conferred upon them by the planning act. The Niagara

Escarpment Plan identifies that all development involving cutting of trees requires approval from the implementing authority.

At the time of developing this strategy document, the Niagara Escarpment Commission have developed draft technical criteria for vegetation protection plans and have initiated a targeted consultation process with key stakeholders and municipalities within the Niagara Escarpment Plan area, to be completed in late-2021. Where it is anticipated that proposed development may impact existing vegetation, the Niagara Escarpment Commission may require a Vegetation Protection Plan for direct Niagara Escarpment Commission development permit applications, Niagara Escarpment Plan amendments or for municipal, provincial, or federal processes/applications where the Niagara Escarpment Commission is a commenting agency. The intent is not to duplicate the work of applicable municipal by-laws or other agencies' policies, including where more stringent policies are in place.

## 2.5 Greenbelt Act, 2005

The Greenbelt Act's purpose is to establish a network of countryside and open space areas which support the Oak Ridges Moraine and the Niagara Escarpment, preserves, and recognizes the contributions of agricultural land as a source of food and employment, control the urbanization of lands within which the Greenbelt plan applies, and ensure that development of transportation and infrastructure proceeds in an environmentally sensitive manner. Within the context of the Town of Halton Hills, the regulations, policies, and guidelines of the act must be considered for lands designated as protected countryside.

## 2.6 Municipal Act, 2001

The Municipal Act outlines the responsibilities and accountability of municipalities as created by the province for the purpose of providing good government with respect to the given powers and duties under the Act. A lower-tier municipality may provide any service or thing that the municipality considers necessary or desirable for the public, subject to the rules as outlined in subsection (4) of the Act. This includes but is not limited to the economic, social, and environmental well-being of the municipality, including respecting climate change, services, and responsibilities





that the municipality is authorized to provide under subsection (1), and the protection of persons and property, including consumer protection.

The Policies section of the act identifies that:

Schedule 270 (1), A municipality shall adopt and maintain policies with respect to the following matters: 7. The manner in which the municipality will protect and enhance the tree canopy and natural vegetation in the municipality 2006, c. 32, Sched. A, s. 113; 2017, c. 10, Sched. 1, s. 32.

The Natural Environment section of the Act identifies that:

Schedule 135 (1), and subject to subsection (4), and without limiting sections 9, 10 and 11, a local municipality may prohibit or regulate the destruction or injuring of trees. 2006, c. 32, Sched. A, s. 71 (1).

Subsection (4) restricts a lower municipality from regulating trees in woodlands designated by an upper tier municipality by-law. It must also have regard for good forestry practices as defined under the Forestry Act, 1990. The Municipal Act also identifies that the municipality may outline conditions under the by-law, including requiring a permit be obtained to injure or destroy trees, and impose conditions of the permit, including conditions relating to the manner of impact/removal and the qualifications of the person authorized to injure or destroy trees.

## 2.7 Forestry Act, 1990

The Forestry Act provides a legal definition for woodlands, identifying a woodland based on the number of trees per hectare within certain size ranges. It additionally excludes plantations for the purpose of Christmas trees and cultivated fruit or nut orchards from the definition of a woodland. The Forestry Act also identifies good forestry practices, identifying the proper implementation of harvest, renewal, and maintenance activities as appropriate to the forest and environmental conditions under which they are being applied to minimize negative impacts to the woodland's ecological values. The Forestry Act also provides legal provisions and offences as they relate to boundary trees, and trees on common property.

## 2.8 Ontario Heritage Act, 1990

The Ontario Heritage Act includes policies and regulations as it relates to the designation of heritage properties and cultural heritage landscapes in Ontario. This may include trees considered to have heritage value or as part of a heritage conservation district. Heritage trees may be designated under Part IV, section 29, and Part V of the Ontario Heritage Act; additionally, the council of a municipality may, under a by-law, designate a property within a municipality to be of cultural heritage value or interest under the OHA Part IV, sections 29 to 34.4. After a tree is designated by the Minister of Tourism, Culture, and Sport, the tree cannot be destroyed or altered without Minister consent. Under section 27 of the Heritage Act, a tree may also be listed on the municipal register, affording temporary protection of up to 60 days.

## 2.9 Endangered Species Act, 2007

The Endangered Species Act (ESA) applies to any tree species listed as endangered or threatened in the province of Ontario. Any listed tree species is afforded protection of both the tree and its designated habitat as outlined under the ESA. American Chestnut, Butternut, Cucumber Tree, Eastern Flowering Dogwood, and Kentucky Coffee-tree are all afforded protection under the ESA where specimens are naturally occurring.

## 2.10 Farming and Food Production Protection Act, 1998

The Farming and Food Production Act identified under section 6(1) states that no municipal by-law applies to restrict a normal farm practice carried on as part of an agricultural operation. Agricultural operation, for the purpose of the Act is defined as "agricultural, aquacultural, horticultural or silvicultural operation" including ... "(c) the production of agricultural crops, greenhouse crops, maple syrup, mushrooms, nursery stock, tobacco, tree and turf grass, and any additional agricultural crops prescribed by the Minister"...and... "(k) any other agricultural activity prescribed by the Minister, conducted on, in or over agricultural land."

## 3.0 Existing Education & Incentive Programs

Education and incentive programs are available in many municipalities, regions, and jurisdictions in Ontario. These can vary from guided educational programming, to grants and subsidies, to tree planting and creating habitat on private lands. While not all programs are available to residents and landowners in Halton Hills, several are currently available through local conservation authorities, provincial and regional initiatives, and are described in section 2.1 below.

## 3.1 Within the Town of Halton Hills

Several education and incentive programs currently exist for residents and landowners within the Town of Halton Hills. Programs range from Conservation Authority-led educational programs to provincewide tree planting programs and annual tree sales subsidized and supported by the Town.

#### 3.1.1 Conservation Authorities

The Town of Halton Hills includes lands under the jurisdiction of three conservation authorities: Credit Valley Conservation, Conservation Halton, and the Grand River Conservation. Each conservation authority provides education and incentive programs which can benefit the residents and landowners in the Town of Halton Hills and contribute to education and stewardship of private trees and urban forests in the Town. The geographic area included within the Town of Halton Hills for each conservation area that determines eligibility for each program is shown in Table 1. Below is a summary of the programs currently available that include lands within the Town of Halton Hills.



Figure 3 Conservation Authority jurisdictions in the Town of Halton Hills

#### 3.1.1.1 Conservation Halton

Conservation Halton offers several programs for residents and landowners within the watershed, including community outreach, in-person consultations and assistance with accessing several provincial programs and funding opportunities. Programs available are identified in Table 1.

Table 1. Pr	ograms available	through Conse	rvation Halton
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Program Name	Eligibility Criteria	Available to Town of Halton Hills' Residents & Landowners
Trees for Watershed Health	None	Yes, within watershed boundary
Tree Planting Program	<ul> <li>Minimum 2.5 acres of open and suitable land for tree planting</li> <li>15-year landowner agreement</li> <li>Able to cover costs after subsidy</li> <li>Minimum 100 tree order (min 2 species) for purchasing locally sourced native tree seedlings</li> </ul>	Yes, within watershed boundary
Managed Forest Tax Incentive Program	<ul> <li>Minimum 4 hectares of forested land</li> <li>Preparation of forest management plan</li> </ul>	Yes, provincial program; Conservation Halton assists landowners
Landowner Environmental Assistance	Landowners of natural areas and watercourses	Yes, within watershed boundary
Curriculum and Public Education Programs	<ul> <li>Dependent on programming, curriculum-based programs delivered within schools</li> <li>Public programs led in CA parks and conservation reserves</li> </ul>	Yes, within watershed boundary

Each program targets aspects of improving forest and tree health. Availability is dependent on several factors, with a minimum land size and presence of existing natural heritage features, such as woodlands and watercourses required for most programs. Both curriculum and public education programs are open to schools and the public, with an emphasis on outdoor education programs, such as the 'From the Ground Up' program, which involves students in hands-on stewardship activities. The program includes a lesson with students, followed by planting of native species in local natural areas or parks, enhancing the urban environment. All Conservation Halton programs are available to residents and landowners within the watershed boundary, or are provincial programs administered by Conservation Halton to residents within the watershed boundary.

#### 3.1.1.2 Credit Valley Conservation Authority

The Credit Valley Conservation Authority offers several programs, several of which are in partnership with Halton Region or facilitate programs offered through the province of Ontario. Several programs related to private trees can benefit residents and landowners in the Town of Halton Hills, and depending on eligibility requirements, include the following:

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Private Landowner Reforestation Planting Program	<ul> <li>Minimum of 2 acres of land and a minimum order of 1,500 seedlings</li> </ul>	Yes, within watershed boundary
Managed Forest Tax Incentive Program	Minimum 9.88 acres of land	Yes, within watershed boundary
Woodlot "Walk & Talk"	None	Yes, within watershed boundary
Native Plant Direct Sale Program	• 10 Plant minimum	Yes, within watershed boundary
Property Severances – Tree Preservation & Compensation Plans	<ul> <li>Planned rural lot severance</li> </ul>	Yes, within watershed boundary
Naturalization Stock Direct Sale Program	<ul> <li>Minimum of 1 acre of land and minimum order of 20 units</li> </ul>	Yes, within watershed boundary
Potted Plants Program	<ul> <li>Minimum of 2 acres of land; minimum order of 100 potted native trees and shrubs</li> </ul>	Yes, within watershed boundary
Landowner Action Fund	<ul> <li>Minimum of 1 acre of land</li> <li>Projects that protect water sources, improve habitat for fish and wildlife and adaptation to climate change</li> </ul>	Yes, within watershed boundary
Your Green Yard	None	Residents of Hungry Hollow SNAP
Earth Day Tree Plants	None	No, Mississauga and Orangeville partnership

Table 2. Credit Valley Conservation Authority Programs

Programs target various levels of landowner and public engagement. Many of the incentives include requirements for minimum land size or minimum order size to be eligible for the program, typically from 1 to 10 acres are required. Other programs, such as the Potted Plant program, Your Green Yard and Earth Day Tree Plants are community and education focused and any member of the public can participate or become involved. Several of these programs are in partnership with area municipalities; for example, Earth Day Tree Plants occur in Mississauga and Orangeville but are not available to residents of the Town of Halton Hills.

#### 3.1.1.3 Grand River Conservation Authority

The Grand River Conservation Authority offers several programs, several of which are in partnership with Halton Region or facilitate programs offered through the province. Several programs related to private trees can benefit residents and landowners in the Town of Halton Hills, and depending on eligibility requirements, include the following:

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
GRCA tree planting services	Minimum of 5 acres of land	Yes, within watershed boundary
Community tree groups	None	No, group currently established for Halton Hills
Rural Water Quality Program	Rural landowners with floodplain, watercourse, riparian areas, steep slopes, or wetlands on their property	Yes, within watershed boundary
Annual End-of-year Tree Sale	None	Yes, within watershed boundary

Table 3. Grand River Conservation Authority Programs

Programs target various levels of landowner and public engagement. The programs offered place focus on community engagement and education, with only one having a minimum land size requirement. Several community tree groups have been established throughout the Grand River watershed; however, none currently exist within Halton Hills. Most of the programs offered by the Grand River Conservation Authority are only available to residents and landowners residing within the Grand River watershed.

#### 3.1.2 Halton Region

Halton Region offers one program which provides greater awareness of the care and management of the Region's forested areas. This program is related to private trees and can benefit residents of the Town of Halton Hills.

#### Table 4. Halton Region Program

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Halton Woodlands Stewardship Program	Preparation of a Forest Management Plan: Minimum 2 hectares Tree marking services: Minimum 0.5 hectares Purchase and planting of nursery stock: Minimum 2 hectares	Yes

The Woodlands Stewardship Program is for private landowners with a minimum of 2 hectares of forested land and supports Halton Region's rich and diverse natural legacy, unique features, and diverse plants and wildlife. To take part in the program, residents must meet the eligibility criteria and submit an application to the Region of Halton.

#### 3.1.3 Town of Halton Hills

Since 2001, the Town of Halton Hills has continued to operate a successful annual subsidized tree sale, typically in April, to celebrate the globally recognized Earth Day. This program relates to private trees and benefits residents and landowners in the Town of Halton Hills. To support the Earth Day Tree Sale, the Town of Halton Hills purchases 1,000 trees through an open bid process in accordance with Procurement By-law 2017-0061. Due to public health protocols, the Town has recently updated the Earth Day Tree Sale from a first-come basis, to an online store and reservation/pick-up system.

#### Table 5. Town of Halton Hills Program

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Earth Day Tree Sale	Ability to purchase trees at a subsidized cost at Robert C. Austin Operations Centre Maximum five trees per person	Yes

#### 3.1.4 Other Agencies

#### 3.1.4.1 Forests Ontario

Forests Ontario offers two programs to support tree planting initiatives across the province. Both programs are related to private tree planting and can benefit residents of the Town of Halton Hills, depending on eligibility requirements, and include:

#### Table 6. Forests Ontario Programs

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
50-Million Tree Program	Minimum number of trees required is 500 (approximately 0.5 hectares of available land) 15-year landowner agreement	Yes
Over-the-Counter Tree Seedling Sales Program	No minimum number of trees, at discretion of nursery Seedlings must be ordered from select nurseries Receipts must be submitted for all approved seedings	Yes

The Forests Ontario programs target tree planting initiatives for residents and landowners on multiple scales. Both programs offered have eligibility criteria, however, they are available to landowners with varying sizes of property to subsidize the planting or purchase of tree seedlings. Residents of the Town of Halton Hills can take part in both programs.

#### 3.1.4.2 Trees for Halton Hills

Trees for Halton Hills is a new non-profit organization led by volunteers, with the support of the Town of Halton Hills. The organization encourages residents in the community to engage in planting 65,000 trees (one for every resident) over the next five years to the benefit of the community. Trees for Halton Hills has organized several tree sales corresponding with holidays and recently held their official opening of the Trees for Halton Hills Arboretum and launch of the 65,000 Tree Challenge.

#### 3.1.4.3 Willow Park Ecology Centre

Willow Park Ecology Centre is a well-established 30-year-old volunteer-managed nature park and outdoor education centre located in Norval. The Ecology Centre offers education programs for school-aged children from Kindergarten to Grade 8 as well as community programs and volunteer events for the public. Willow Park Ecology Centre serves the Greater Toronto Area, including Halton region schools.

#### Table 7. Willow Park Ecology Centre Programs

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Curriculum and Public Education Programs	Dependent on programming, curriculum- based programs delivered in-park or in- school. Programs developed for grades Kindergarten to Grade 6	Yes

## 3.2 Other Programs Within the Province

Conservation Authorities, as well as upper and lower tier municipalities throughout the province offer programs and assistance with a focus on preserving and enhancing the tree canopy. Most of the programs are presented below as examples of the types of programs offered in areas not available to residents of the Town of Halton Hills, but may provide guidance for future programs and/or collaborative efforts that could be implemented.

#### 3.2.1 Conservation Authorities

#### 3.2.1.1 Toronto Region Conservation Authority

The Toronto Region Conservation Authority offers multiple programs to help landowners restore and improve their properties through the planting of native trees and shrubs. These programs are available to all landowners with properties within the Toronto Region Conservation Authority watershed provided they meet the eligibility requirements.

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
TRCA Planting Services	Minimum land size of 0.8 hectares (2 acres)	Only available for properties within TRCA jurisdiction
Native Plant Materials (supply only)	Minimum land size of 0.8 hectares (2 acres) Minimum order of 30 BR trees or 75 shrubs or combination of both for 100 seedlings	Only available for properties within TRCA jurisdiction
Managed Forest Tax Incentive Program	Minimum land size of 4 hectares (9.88 acres) At least 50% Canadian owned Have an approved Managed Forest Plan, following good forestry practices	Provincial program. Halton Hills residents can apply through local Conservation Authority

The programs provided and managed by the Toronto Region Conservation Authority focus on the restoration of private lands through the planting of native trees, shrubs, and seedlings, as well as recognizing the importance of privately-owned forests. Depending on the location of the property and the nature of the project, Toronto Region Conservation Authority provides funding and technical assistance for all programs.

#### 3.2.1.2 South Nation Conservation Authority

The South Nation Conservation Authority located in eastern Ontario offers multiple programs for residents within the watershed, including private woodlot management and reforestation. The programs are provided in Table 9.

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
SNC Woodlot Advisory Service	Minimum land size of 4 hectares	Only available for properties within South Nation Conservation jurisdiction
Green Acres - Ottawa's Rural Reforestation Program	Rural property owner within the City of Ottawa boundary Minimum suitable land size of 0.4 hectares	Only available for properties within South Nation Conservation jurisdiction

Table 9. South Nation Conservation Authority Programs

The programs provided by the South Nation Conservation Authority target a variety of aspects of managing and improving forest health and cover throughout the watershed, but are dependent on the size of the property. Grants provided in collaboration with the City of Ottawa allow landowners the opportunity to prepare a planting plan, plant seedlings, and subsequently provide care at a subsidized cost with assistance from environmental professionals.

#### 3.2.1.3 Rideau Valley Conservation Authority

Rideau Valley Conservation Authority located south of Ottawa offers multiple programs to residents within the watershed, including tree planting services and Butternut management. The programs are provided in Table 10.

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Tree Planting Services	Minimum suitable land size of 0.4 hectares (1 acre) Order a minimum of 1000 trees Agree to reasonably protect trees from damage	Only available for properties within Rideau Valley Conservation jurisdiction
Butternut Recovery Program	Known Butternut on property	Only available for properties within Rideau Valley Conservation jurisdiction

The programs offered by Rideau Valley Conservation Authority focus on the reforestation of idle lands including technical advice, customized planting plans, tree planting and tending, and survival assessments. In addition, the Butternut Recovery program aims to inform landowners about Butternut trees and encourages them to maintain their healthy trees.

#### 3.2.1.4 Lower Thames Valley Conservation Authority

The Lower Thames Valley Conservation Authority located in Chatham, Ontario, offers multiple programs to residents within the Lower Thames watershed including tree planting services and habitat restoration grants. The programs are provided in Table 11.

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Tree Planting Services	Must inquire with CA staff	Only available for properties within Lower Thames Valley Conservation Authority jurisdiction
Habitat Restoration Grants	Must inquire with CA staff	Only available for properties within Lower Thames Valley Conservation Authority jurisdiction

The programs offered by the Lower Thames Valley Conservation Authority aim to help with planting trees and creating various types of habitats on private lands. The Tree Planting services provide a variety of tree species, seedlings, and large stock, available to rural landowners with approved sites.

#### 3.2.1.5 Long Point Region Conservation Authority

The Long Point Region Conservation Authority located in Simcoe, Ontario, offers several programs to residents within the watershed, including a Tree Planting Service and Restoration Services. The programs' eligibility and availability are provided in Table 12.

#### Table 12. Long Point Region Conservation Authority Programs

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Tree Planting Services	Must inquire with CA staff	Only available for properties within Long Point Region Conservation Authority jurisdiction
Habitat Restoration Services	Must inquire with CA staff	Only available for properties within Long Point Region Conservation Authority jurisdiction

The programs offered by the Long Point Region Conservation Authority aim to aid with planting trees and creating various types of habitats on private lands. The Tree Planting services include subsidies to help reduce the cost of purchasing and planting stock.

#### 3.2.1.6 Upper Thames River Conservation Authority

The Upper Thames River Conservation Authority offers multiple programs to residents within the Upper Thames watershed including a Tree Planting program and habitat restoration grants. The programs are provided in Table 13.

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Tree Planting Services	Minimum 1 hectare	Only available for properties within Upper Thames River Conservation Authority
Communities for Nature	Partnership between corporations and community UTRCA coordinates sites and community involvement	Only available for properties within Upper Thames River Conservation Authority

 Table 13. Upper Thames River Conservation Authority Programs

The programs offered by the Upper Thames River Conservation Authority aim to aid with planting trees and creating various types of habitats on private lands and involving the public in community initiatives. The Tree Planting services provide a variety of tree species, seedlings, and large stock, available to rural landowners with approved sites, include minimum order numbers, and can be completed by landowners or with the assistance of the UTRCA.

#### 3.2.1.7 Raisin Region Conservation Authority

The Raisin Region Conservation Authority located in eastern Ontario offers multiple programs to residents within the Raisin Region Conservation watershed, including tree planting services and habitat restoration grants. The programs are provided in Table 14.

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Full-Service incentive program	Partnership with Trees Ontario, requires 15-year agreement 1 hectare or greater and currently free of trees	Only available for properties within Raisin Region Conservation Authority jurisdiction
Over the Counter Tree Orders	Smaller projects, individual trees for purchase by landowners	Only available for properties within Raisin Region Conservation Authority jurisdiction

The programs offered by the Raisin Region Conservation Authority aim to provide landowners meeting criteria with planting trees on private lands. The tree orders provide a variety of tree species, seedlings, and large stock, available to any landowner.

#### 3.2.2 Single Tier, Upper and Lower Tier Municipalities

#### 3.2.2.1 City of Toronto

The City of Toronto offers numerous programs to its residents including several in partnership with other organizations and conservation authorities. Most programs focus on increasing canopy cover, community engagement, and stewardship opportunities and funding. The programs are provided in Table 15.

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Neighbourhood Tree Giveaway program	Community groups Eligibility outlined in application and program guidelines	No
Backyard Tree Planting Program	Resident of the City of Toronto	No
Corporate Tree Planting	Commercial, industrial, or institutional landowners with space for 30+ trees	No
Community Planting & Stewardship Grant	Non-profit organizations, not-for-profit corporations, and charitable organizations that meet eligibility criteria outlined in the guidelines	No
Greening Partnership Grant	Public school boards, hospitals, colleges, universities, and non-profit housing providers that will increase canopy cover through tree planting and stewardship on private land	No

Table 15. City of Toronto Programs

The programs offered by the City of Toronto aim to provide landowners, community groups, organizations, and corporations meeting eligibility criteria with opportunities to plant trees, attend and create education and programing events, and provide funding and grants to help green the City of Toronto and increase canopy cover.

#### 3.2.2.2 City of Guelph

The City of Guelph offers one program to its residents, which focuses on creating healthy natural landscapes for residents. The program is described further in Table 16.

#### Table 16. City of Guelph Program

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Healthy Landscape Visit	Any resident or business in the City of Guelph is welcome to take part	No
Backyard Tree Planting	Refer to section 3.2.3.2	No

The program offered by the City of Guelph aims to provide information to landowners within the city for creating healthy yards using appropriate and drought-tolerant native species to reduce maintenance and pest control needs. It includes a 45-minute in-person visit, landscape design, and species suggestions based on their yard's unique

requirements. The program has an overall goal to increase tree canopy, native species use, reduce water and pesticide use in the community.

#### 3.2.2.3 Town of Caledon

The Town of Caledon offers one program to its residents, which provides potted trees and bundled seedlings at a reasonable cost to residents. The program is described further in Table 17.

#### Table 17. Town of Caledon Program

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Tree Seedling Program	Any resident or business in the Town of Caledon is eligible. Proof of identification must be provided on pickup	No

The programs offered by the Town of Caledon aims to provide residents with the option to purchase potted trees and bundled seedlings. The program has an overall goal to increase tree canopy, and to reduce impacts of climate change.

#### 3.2.2.4 City of Cambridge

The City of Cambridge subsidises one program in partnership with REEP Green Solutions Backyard Tree Planting program. For further details on this program, please refer to section 2.2.3.2.

#### 3.2.2.5 City of Burlington

The City of Burlington does not currently offer any incentive or education programs for private residents. However, several are being considered and examined at this time.

#### 3.2.2.6 Niagara-on-the-Lake

The Town of Niagara-on-the-Lake does not currently offer any incentive or education programs for private residents.

#### 3.2.2.7 City of Richmond Hill

The City of Richmond Hill offers two programs to its residents. The first subsidizes fees for backyard tree planting on private property. The second program focuses on creating healthy natural landscapes for residents. The programs are described further in Table 18.

Table 18. City of Richmond Hill Program

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Backyard Tree Planting Program	Resident of the City of Richmond Hill	No
Healthy Yards Program	Resident of the City of Richmond Hill	No

The programs offered by the City of Richmond Hill aim to help residents plant backyard trees and provide information to landowners within the city for creating healthy yards using appropriate native species that improve the natural environment.

#### 3.2.2.8 Town of Oakville

The Town of Oakville has two programs available to its residents. The first subsidizes fees for front yard tree planting on private property, allowing for the planting of a larger tree than the municipality would plant on the adjacent municipal lands. The second program focuses on building education and encouragement for tree planting in their constituency. The programs are described further in Table 19.

#### Table 19. Town of Oakville Program

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Resident's Partnership Program in Street Tree Replacement	Resident of the Town of Oakville without a municipal or private tree in their front yard	No
P.L.A.N.T. (Please Let's Add New Trees!)	Resident of the Town of Oakville	No

The programs offered by the Town of Oakville aim to provide information to landowners within the Town on improving the natural environment through tree planting.

#### 3.2.2.9 City of London

The City of London has two programs available to its residents: The first provides funding opportunities to residents, community groups, etc., to plant trees on private property. The second program focuses on building momentum for change by inspiring their residents to increase the urban canopy, reach the city's goals, and encourage tree planting on private property throughout the city. The programs are described further in Table 20.

#### Table 20. City of London Programs

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
TreeME	Community groups, not-for-profit organizations, businesses, and small groups of neighbours of the City of London	No
Million Tree Challenge	Partnership with ReForest London. Any resident can participate by planting, sponsoring, or suggesting locations for new trees	No

The programs offered by the City of London aim to provide incentives to residents and build momentum within the city to increase the urban tree canopy through tree planting.

#### 3.2.2.10 Wellington County

Wellington County offers one program to its residents: the Green Legacy Program. Wellington County founded the Green Legacy Program in 2004 with the intention of a one-time celebration to plant 150,000 trees for the county's 150<sup>th</sup> anniversary. The program is described further in Table 21.

Table 21. Wellington County Program

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Green Legacy Program	Anyone who wants to plant trees within one of the seven eligible counties. Includes outside residents who want to plant within the County with proof of permission from landowner	No

The non-profit program funded entirely by Wellington County blends childhood education, community development through volunteerism, nursery production, and tree planting. The program distributes tree seedlings and small potted stock free of charge to residents, landowners, and community organizations for planting on public and private land. At the time of this strategy document, every student in Wellington County has participated in the education program and nursery production totalling more than 2 million trees over the past 17 years. The program was formally recognized by the United Nations Billion Tree Campaign to mitigate climate change in 2010.

#### 3.2.3 Other Agencies

#### 3.2.3.2 REEP Green Solutions

REEP Green Solutions works in collaboration with several municipalities (as described in section 2.2.2) to offer subsidized backyard tree planting programs for residential homeowners. The program is described further in Table 22.

#### Table 22. REEP Green Solutions Program

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Backyard Tree Planting	Available to residents of the City of Cambridge, Kitchener, and Waterloo. 2021 Pilot program in City of Guelph Available space in yard must meet certain conditions and must be in the back yard	No

The backyard tree planting program offered by REEP provides a turnkey service with in-person consultation from an arborist, as well as delivery and planting the right tree in the right place. The cost of the consultation, labour and tree is partially subsidized by the municipality, with the remaining cost paid by the resident or landowner. The aim of the program is to provide incentives to residents and build momentum within the served municipalities to increase the urban tree canopy through tree planting.

#### 3.2.3.3 Land Care Niagara

Land Care Niagara offers two programs aimed at increasing tree cover, available to residents of Niagara Region. The first is directed at urban tree planting to increase canopy in urban environments. The second program is working as a delivery agent for the Forests Ontario 50 Million Trees Program in rural environments. The programs are described further in Table 23.

#### Table 23. Land Care Niagara

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Urban Tree Planting Program (ReLeaf Niagara)	Matches trees with community mentors and tree recipients to provide sites for planting	No
Rural Niagara Tree Planting Program	Minimum 2.5 acres and plant a minimum of 500 trees to qualify; and make a financial contribution (not fully funded, typically \$1,500.00) Priority to properties within framework areas	No

The programs offered by Land Care Niagara aim to increase urban tree canopy and build robust linkages between natural heritage areas in the rural areas of Niagara Region.

#### 3.2.3.4 Oakvillegreen Conservation Association

Oakvillegreen is a community organization that runs several tree planting, stewardship, education, advocacy, and leadership programs in the Town of Oakville. Two programs that have been offered in the past are also currently available. They promote increasing tree cover in urban environments, and are described further in Table 24.

#### Table 24. Oakvillegreen Conservation Association Programs

Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Backyard Tree Planting	Partnership with LEAF that at the time of writing is not currently available due to funding Available space in yard must meet certain conditions and must be in the back yard	No
Oakville TreeKeepers	Resident of the Town of Oakville	No

The programs offered by the Oakvillegreen Conservation Association aim to increase urban tree canopy and grow resident knowledge to become stewards of local green spaces. The association also organizes native tree sales and provides opportunities for education and outreach in the community.

#### 3.2.3.5 LEAF - Local Enhancement & Appreciation of Forests

LEAF works in collaboration with several municipalities (as described in section 2.2.2) to offer subsidized backyard tree planting programs for residential homeowners. Their service includes consultation, delivery and planting of

several native species of trees; or a DIY option which provides the tree, and the landowner completes the planting. The program is described further in Table 25.

Table 25. Local Enhancement & Appreciation of Forests (LEAF) Pro	gram
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Program Name	Eligibility Criteria	Available to Town of Halton Hills Residents & Landowners
Backyard Tree Planting	Available to residents of Toronto, York Region (Aurora, East Gwillimbury, Georgina, King, Markham, Newmarket, Richmond Hill, Vaughan, Whitchurch- Stouffville) and Durham Region (Ajax, Oshawa, Pickering, Scugog & Whitby). Available space in yard must meet certain conditions and must be in the back yard	No

The Backyard Tree Planting program offered by LEAF provides a turnkey service with in-person consultation from an arborist, as well as delivery and planting the right tree in the right place. The cost of the consultation, labour and tree is partially subsidized by the municipality, with the remaining cost paid by the resident or landowner. Each individual municipality negotiates an agreement with LEAF that identifies annual planting targets and funding. The programs offered by LEAF aim to provide incentives to residents and build momentum within the served municipalities to increase the urban tree canopy through tree planting.

## 4.0 Existing Contributing Regulations (By-laws, Policies & Guidelines)

## 4.1 Town of Halton Hills

The Town of Halton Hills has included consideration for protection of trees through several avenues in existing bylaws, policies, and guidelines. This includes the official plan, community sustainability strategy, mature neighbourhood strategy, climate adaptation policy, and tree canopy and natural vegetation policy. Each are described below in further detail and identifies their objectives and how they relate to the protection of trees in the Town of Halton Hills.

#### 4.1.1 Official Plan

The Environmental Management Policies (Part C) of the Town of Halton Hills Official Plan Environmental Management Objectives are identified as the following:

- a. "Encourage the further study of natural heritage features and related ecological functions to provide information that may assist in determining appropriate measures to protect them;"
- b. "Preserve trees and wooded areas and facilitate the planting of trees, to the extent practicable, including through the development process;"
- c. "Identify the tools that are required to evaluate an application for development in or adjacent to natural heritage features and related ecological functions that are considered to be an integral component of the Natural Heritage System of the Town;"



ADOPTED MARCH 2008 | CONSOLIDATED DECEMBER 31, 2020

#### 4.1.2 Integrated Community Sustainability Strategy

Section 6, Environmental Health of the Integrated Community Sustainability Strategy defines "Tree canopy cover as a percentage of Town area – total coverage and urban area coverage" as one of five priority measurement indicators of environmental health including the goal of expanding the tree canopy and increasing the number trees in rural and urban areas".



HALTON HILLS

#### 4.1.3 Mature Neighbourhood Strategy Character Study

This study examined whether current zoning and by-laws were effective in maintaining the character of mature neighbourhoods within Georgetown and Acton. Under section 3.3.1 of the study, it was also identified that there was significant interest by the public in the protection and replacement of private trees and the study recommended that the Town may wish to consider innovative approaches for tree replacement and incentive programs for private trees. The study resulted in an official plan and zoning amendment which include By-laws No. 2017-0032 and 2017-0033. Section D1.4 of the Official Plan for the Town of Halton Hills was amended through the addition of the following:

"D1.4.2 New Housing, Replacement Housing, Additions, and Alterations in Mature Neighbourhood Areas New housing, replacement housing, additions, and alterations within Mature

Neighbourhood Areas shall be permitted provided they are compatible, context sensitive, and respectful of the existing character of the neighbourhood. The implementing Zoning By-law shall further detail appropriate standards for new housing, replacement housing, additions, and alterations within Mature Neighbourhood Areas, including lot coverage, building height, and side yard setbacks amongst other standards. Minor variances from the implementing Zoning By-law associated with new housing, replacement housing, additions, and alterations in Mature Neighbourhood Areas shall consider, where applicable:

....c) the preservation of landscaped open space areas and the protection of existing trees;"

#### 4.1.4 Climate Change Adaptation Plan

The Climate Change Adaptation Plan (CCAP) was completed in September 2020 and outlines the recommendations for the Town of Halton Hills to best prepare for the changing climate and impacts on residents and the community through adaptation and adoption of several goals, objectives, and actions. Included in section 2.3 of the plan is that Halton Hills has a resilient and protected tree canopy, including 2.3.2:

"Maintain existing tree planting programs and improve education around tree planting".

And 2.3.3:

"...the implementation of a public tree management plan and privatelyowned tree management strategy to encourage more tree planting and better tree maintenance."











#### Appendix A

2020

#### 4.1.5 Tree Canopy & Natural Vegetation Policy

Section 270 (1) (7) of the Municipal Act, 2001, S.O. 2001, c. 25 requires that municipalities adopt a policy which describes the way a municipality will protect and enhance the tree canopy and natural vegetation in the municipality.

The Town of Halton Hills adopted a Tree Canopy & Natural Vegetation Policy (2019) that broadly describes:

- the benefits that a healthy tree canopy provides to the greater community;
- that all public and private tree canopy and natural vegetation in settlement and rural areas within the Town will be protected and enhanced;
- existing programs, policies, and by-laws are to be supported, and
- that future studies, such as this Privately-Owned Tree Management Strategy are to be supported.

#### 4.1.6 By-laws

At this time, a Town of Halton Hills by-law specifically regulating privately-owned trees does not exist. However, several existing Town by-laws indirectly address the management of privately-owned trees.

#### 4.1.6.193-106 Trees on Highways

The Town's Trees on Highways By-law allows private trees adjacent to a highway within the jurisdiction of the Town to be trimmed, as directed by the Town Engineer where their branches extend over the Highway. It also directs the Town Engineer on the appropriate steps to take where the costs are to be incurred by the resident. Specifically:

'6. The Town Engineer may also direct the trimming of trees growing on lands adjacent to the Highway where their branches extend over the Highway. Such trimming may be at no cost to the Owner of the tree with branches overhanging the road allowance if the Town Engineer considers it inappropriate to charge the Owner for such works. When the Town Engineer considers it appropriate for the Town to be reimbursed by the Owner of the Tree for the costs incurred by the Town in trimming the Owner's Tree, the following steps shall be taken:

(a) The Town Engineer shall provide the Owner of any Tree growing adjacent to a Highway which, in his opinion, requires trimming, with ten (10) days' notice to trim such Tree.

(b) If, after the ten (10) day notice period, it is the opinion of the Town Engineer that the Tree still requires trimming, the Town may proceed to trim the Tree and, upon doing so, the Owner shall reimburse the Town for all costs incurred by the Town.

#### 4.1.6.2 2008-0137 Property Standards

The Town's Property Standards By-law Includes consideration for landscaping, hedges, trees, and other buffering that has been required as a condition of development; or re-development must be maintained in good repair or in a living condition per section 11.5 which states:

"...Required trees, hedges and landscaping material shall be replaced as often as necessary to ensure that the intent of the original requirement is adhered to".

#### 3.1.6.3 2017-0040 Site Alteration

The Town's Site Alteration By-law requires that for all site alteration permits, the location of all existing trees greater than 75mm in calliper must be identified, and tree protection measures included on the site control plan. The By-law does not specifically prohibit or regulate the destruction or injuring of trees or described compensation for removal of trees.

#### 4.1.7 Council Resolution

#### 4.1.7.1 Climate Change Resolution

The Town of Halton Hills passed a resolution on May 6, 2019, in response to the Canada's Changing Climate Report 2019. The resolution identified several strategies that are to be implemented in the Town of Halton Hills, including: "7. that the role of a healthy eco-system including its important function of sequestering carbon be recognized as fundamental to any climate change plan by measures such as expanding tree planting and maintenance budgets".

#### 4.1.8 Subdivision Manual

The Town of Halton Hills Subdivision Manual applies to subdivision development under provisions outlined in the Town's Official Plan and the Planning Act. The manual generally describes the reports, plans, and agreements required to be fulfilled by the Developer in the planning, approval, and construction of a subdivision. Section 1.0 General information states:

"(b) Co-ordinate any necessary reports including, but not limited to, preliminary servicing, geotechnical, environmental site assessment and remediation, noise, stormwater management, tree preservation and inventory, siltation and traffic, including the preparation and submission of associated engineering reports."

Section 3.6.4 further describes tree inventory requirements:

"A plan illustrating the existing trees on the subject site shall be provided. Trees shall be indicated with reference to the size (neigh, diameter of trunk), number, species and existing condition. Trees, which are designated as a 'protected species' by the applicable Conservation shall be indicated as such on the plan. The inventory shall address the need for tree removal during the construction period and the method for protecting trees that are to remain."

Without limiting the requirement to preparing a tree inventory and preservation plan as part of subdivision approval and development, the description in the Subdivision Manual does not specify the minimum size of trees to be included in the inventory, minimum standards for adequate tree preservation, or does not describe the requirement for tree replacement/compensation. Provision of these three standards in municipal development manuals and guidelines are typical in comparable municipalities in the Greater Toronto and Hamilton Area. Setting the minimum standards provides the Developer and their consulting team with a baseline by which the Town will review and approve the tree-related plans and reports.

#### 4.1.9 Site Plan Application Guide

The Town of Halton Hills Site Plan Application Guide applies to development under provisions outlined in the Town's Official Plan and the Planning Act and Site Plan By-law No. 2003-0094. The guide generally describes the procedures, drawing requirements, and site plan standards required to be fulfilled by the Developer in the planning, approval, and construction of a site development. Section 4.11.1 of the Site Plan Application Guide describes:

"Significant existing vegetation should be identified by the predominant tree species, average diameter and general condition within the zone. The outside limit of the limit of canopy and base of trunk, species type, size, height, condition, and quality shall be clearly indicated on the plan drawings and retained on the site, where possible.

"The Town's Administration may require, as a condition of approval, that the applicant provide a Tree Survey Plan. The purpose of a Tree Survey plan is to identify the existing vegetation on site and determine what can be preserved within the proposed site development."

The guide further describes the detailed information generally required on a Tree Survey Plan and the minimum specifications for tree preservation. Specifically, that all trees 100 to 200mm calliper and all trees larger than 200mm diameter at breast height are to be inventoried. The language in the guide encourages tree preservation, where possible, but does not require trees to be preserved and there is no set approach to replacing or compensating for trees removed. Section 4.11.1.1 states:

"Trees that have been damaged beyond repair shall be replaced by the developer at his own expense with trees of a size and species as approved by the Town."

In discussion with the Town of Halton Hills Director of Parks and Open Space, this requires that every request for tree compensation be negotiated for every site plan application with no baseline minimum compensation or procedure to calculate compensation. Provision of compensation standards are typical in municipal development guidelines for comparable municipalities in the Greater Toronto and Hamilton Area. Setting the minimum standards provides the Developer and their consulting team with a baseline by which the Town can review and approve tree compensation.

## 4.2 Region of Halton

The Region of Halton includes several components within their official plan, Tree (Woodland) By-law and sustainability strategy, that apply within the Town of Halton Hills. Each are described below in further detail and identifies their objectives and how they relate to the protection of trees in the Town of Halton Hills.

#### 4.2.1 Regional Official Plan

The Halton Region official plan promotes the conservation and wise economic use of trees consistent with the ecological and environmental goals, objectives, and policies of the plan. This includes enacting, in cooperation with the local municipalities, a regional tree conservation by-law to regulate tree removal within Halton and encourage local municipalities to enact their own tree conservation by-laws to regulate tree removal within the Urban Area. Additionally, the Region Official Plan supports local municipalities in requiring all development proposals, to the maximum degree possible, preserve existing trees and plant additional trees in accordance with good forestry management practice.

#### 4.2.2 Sustainable Halton

Sustainable Halton is a technical growth management and land use project that reviewed and produced 22 technical reports to aid in the assessment of growth and land use planning in Halton Region. It includes four phases and reviewed all aspects of growth, including, but not limited to, climate change and natural environment.

#### 4.2.3 Halton Tree By-law 121-05

The Halton Region Tree By-law regulates destruction or injury of trees within areas that meet the definition of a woodland, as defined by the Forestry Act.

- 1,000 trees, of any size, per hectare;
- 750 trees, measuring over five (5) centimetres in diameter at DBH per hectare;
- 500 trees, measuring over twelve (12) centimetres in diameter at DBH, per hectare; or
- 250 trees, measuring over twenty (20) centimetres in diameter at DBH, per hectare.

The scope of the Halton Region Tree By-law regulates the destruction or injuring of trees on properties containing all or part of a woodland that is greater than 0.5ha in size and properties partially or entirely within the Regional Greenlands System (current nomenclature in Regional Policy uses the term 'Natural Heritage System'.



HALTON REGION OFFICIAL PLAN Critical Plan for the Ulator Torring Area Regional Manadophy of Tables Officer Gradues Just 19 20 4



Figure 4. Town of Halton Hills Official Plan Environmental Natural Areas

Halton Region has been designated authority from the Town of Halton Hills to regulate woodlands 0.5 hectares and larger. In accordance with the Municipal Act (schedule 135 (4), the Town of Halton Hills may not prohibit or regulate the destruction of trees already regulated by the Halton Region Tree By-law.

At the time of publication, the Halton Region Tree By-Law 121-05 is currently under review.

#### 4.2.4 Halton Woodlands Stewardship Program

The Halton Woodlands Stewardship program, like many offered by conservation authorities, targets private landowners with larger tracts of land. Services include preparation of forest management plans, and purchase and planting of nursery stock on lands a minimum 2 hectares in size and tree marking services for woodlands a minimum of 0.5 hectares in size.

## 5.0 Existing Private Tree Policies and By-laws in Other Municipalities

In accordance with the Municipal Act, all municipalities are required to adopt and maintain policies that protect and enhance the tree canopy and natural vegetation. At the time of publication, approximately 45 single and lower-tier municipalities in Ontario have adopted by-laws that prohibit or regulate the destruction or injuring of privately-owned trees. This strategy examines four recently adopted Private Tree By-laws in single tier municipalities, combining different by-law attributes to protect and enhance the tree canopy and natural vegetation.

#### 5.1.1 Town of Oakville

The Town of Oakville first adopted a Private Tree By-law in October 2008. An updated By-law was adopted in May 2017. Like Halton Hills, the Halton Region Tree (woodland) By-law 121-05, most recently updated in 2006 and currently under review at the time of publication, regulates trees in woodlands greater than 0.5 hectares in size and the mapped Region Natural Heritage System.

A summary of the key attributes of the Town of Oakville Private Tree By-law are in Table 25.

## 5.1.2 City of Burlington

The City of Burlington adopted its current Private Tree By-law in January 2020. Prior to the current By-law, the city enacted a pilot By-law in March 2019 within the boundary of the Roseland community. At the time of submission of this draft report, city staff have recommended several amendments to the current Private Tree By-law to improve administrative efficiency and processes, clarifying definitions, adjusting exemptions, and application fee structure.

Like Halton Hills, the Halton Region Tree (woodland) By-law 121-05, most recently updated in 2006 and currently under review at the time of publication, regulates trees in woodlands greater than 0.5 hectares in size and the mapped Region Natural Heritage System.

A summary of the key attributes of the City of Burlington Private Tree By-law are in Table 25.

## 5.1.3 City of Cambridge

The City of Cambridge adopted a Private Tree By-law in October 2018. Similar to the Town of Halton Hills, woodlands one hectare and larger are regulated by Waterloo Region Woodland Conservation By-law 08-026 most recently updated in June 2008.

A summary of the key attributes of the City of Cambridge Private Tree By-law are in Table 25.

## 5.1.4 Town of Niagara-on-the-Lake

The Town of Niagara-on-the-Lake adopted a Private Tree By-law in December 2018 and passed an amendment to the By-law in March 2019. Similar to Halton Hills, woodlands are regulated by a regional municipality, the Woodland Conservation By-law 2020-79 adopted January 2021. The Town of Niagara-on-the-Lake has delegated responsibility to the Region of Niagara to regulate woodlands less than one hectare in size. A summary of the key attributes of the Town of Niagara-on-the-Lake Private Tree By-law are in Table 25.

Table 25. Private By-law Attribute Comparison of Four Municipalities in Southern Ontario

By-law Attribute	Town of Oakville	City of Burlington	City of Cambridge	Town of Niagara-on- the-Lake
Minimum Tree Size	15cm diameter at breast height and larger; trees all sizes required to be retained or planted as part of an approved site plan	20cm diameter at breast height and larger if removing one tree 10cm diameter at breast height and larger if removing five trees	20cm diameter at breast height and larger	12.5cm diameter at breast height and larger
Area Regulated	Urban and Rural Areas	Urban Areas Only	Urban and Rural Areas	Urban Areas Only
Permit Required	Yes	Yes	Yes	Yes
Permit Application Format	Basic online form with digital document upload	Multi-page online form or separate application as part of building permit	Basic online form with digital document upload (using same web application portal as sign permits and selected building permit application types)	Basic online form with digital document upload
Permit Application Fee	\$50 non-refundable fee for the first tree removed (15 to 24 cm DBH) in a 12-month period. \$350 - Non-refundable fee for each additional tree, and trees that are larger than 24 cm DBH. \$740 - if tree removal is a result of a development application: non- refundable fee for second tree (15 to 24 cm DBH) in a 12-month period and any trees that are larger than 24 cm DBH	\$680 for construction- related; \$390 for non- construction related	\$46.45 non- refundable fee	\$50 first tree, \$25 for each additional tree for individuals, and \$250 each tree for corporations
Permit Application	Application required, no fee	Application and fee required. If tree is		Application required, no fee

By-law Attribute	Town of Oakville	City of Burlington	City of Cambridge	Town of Niagara-on- the-Lake
Required for Dead Tree		determined to be dead or terminally diseased, application fee is refunded.		
Supporting Permit Application Documents	Professionally prepared arborist report, followed by on-site consultation with Town Tree Inspector	Professionally prepared arborist report, tree preservation plan, and tree replacement plan	If fewer than four trees, professionally prepared arborist report, tree compensation fee, and photographs. If more than four trees, professionally prepared arborist report, tree compensation fee, photographs, site plan, and landscape / replanting plan	Photos, state why tree is to be removed, at discretion of Town professionally prepared arborist report tree preservation plan, and tree replacement plan may be required
Compensation Requirements	Approximately 1 replacement tree for every 10 centimetre of tree trunk diameter at breast height removed. Cash in lieu of planting \$300 per tree that cannot be planted on subject site	Approximately 1 replacement tree for every 10 centimetre of tree trunk diameter at breast height removed. Cash in lieu of planting \$400 per tree that cannot be planted on subject site	Complex formula, based on trunk diameter of trees removed, city defined basic tree cost, tree condition rating, appraised tree value, and city defined basic tree credit	Yes, ratio based 1:1
Security Deposit	\$300.00 per replacement tree to be planted	\$400.00 per replacement tree to be planted	Tree compensation fee calculation	\$250.00 each compensation tree for individuals, \$500.00 each compensation tree for corporations
Fines	\$400.00 minimum, \$10,000.00 maximum. Total fines not to exceed \$100,000.00. Special fine exceeding \$100,000.00 in circumstances where contravention provides economic advantage or gain	\$500.00 minimum, \$100,000.00 maximum	\$500.00 minimum, \$100,000.00 maximum. Second offence \$1,000.00 per tree to a \$100,000.00 maximum fine. Subsequent offence \$2,500.00 per tree to a \$100,000.00 maximum fine	\$1,000.00 per tree for individuals (\$2,500.00 per tree second offence), \$5,000.00 per tree for corporations (\$10,000.00 per tree second offence), \$100,000.00 maximum fine

## 6.0 Town of Halton Hills Existing Tree Canopy Cover

## 6.1 Background

An objective of this strategy is to establish the tree canopy cover in the Town of Halton Hills. The definition of a 'tree' is any species of woody perennial plant, including its root system, which has reached or can reach a height of at least 4.5 metres at physiological maturity. This definition is consistent with Halton Region's Tree By-law. **Tree canopy cover is defined as the surface area of the land covered by the combined leaves, branches, and trunks of all standing trees when viewed from above.** A tree canopy cover assessment provides a two-dimensional metric related to the extent of cover and distribution across a jurisdiction but does not provide information related to urban forest health, age structure or species diversity.

Determining the Town's existing tree canopy cover provides the community, Town staff, and Town council with context to support specific, measurable, and achievable tree canopy management tools. Expanding the tree canopy is a general goal of several Town policies and guidelines, but it is not possible to quantify 'more' without a baseline.

## 6.2 Methodology

The Town of Halton Hills Information Technology Services department determined the existing Town's tree canopy cover using existing available datasets, including Light Detection and Ranging (LIDAR) data collected from 2016 through 2018 during leaf-on period.

Light Detection and Ranging (LIDAR) images the landscape in three dimensions by measuring the time taken for a laser pulse to travel from a sensor mounted in an aircraft to the ground surface and for the pulse to be reflected back to the sensor. By combining the measured travel time and accurate measurements of the sensor position and orientation in space, the three-dimensional location of the point of reflectance can be established. The methodology to complete the tree canopy cover analysis is summarized in Table 26.

#### Table 26. Tree Canopy Cover Analysis Methodology

Task	Description		
1	Light Detection and Ranging LIDAR data (10 points per m2) used to generate 1m grids of Bare Earth Digital Elevation Model (DEM) and Full Feature Digital Surface Model (DSM) Elevation.		
2	The DEM height (masl) is subtracted from the DSM height (masl) to generate a 1m Feature Height raster dataset.		
3	Raster reclassification, remove areas below 3m in height, reclass all above 3m in height to single Tree Canopy Value of 1. Non-Tree Canopy value is 0.		
4	Convert raster to polygon feature class.		
5	Subtract a 2m buffer of the Town Building Footprints dataset from Tree Canopy. This removes the buildings as well as a 2m buffer adjusting for the majority of inaccuracies in the building dataset.		
6	Isolated areas of Tree Canopy < 1m2 were deleted and holes in Tree Canopy areas < 1 m2 were filled. This is required to simplify the dataset to enable further geoprocessing.		
7	Intersect Tree Canopy with other GIS datasets required to produce summaries (wards, town areas, private/public lands, NHS ROPA 38).		
8	Convert multi-part to single-part features.		
9	Manual review and deletion of obvious false tree canopy areas (some buildings, hydro lines, bridge decks, transport trucks).		
10	Generate Tree Canopy GIS polygon dataset, intersected with Wards, Town Areas (Georgetown/Acton/Norval etc.), NHS ROPA 38/Tree By-Law, Private/Public lands (i.e., column classifications).		
11	Create Excel file of summary tables of total area and percent area of Tree canopy in the above intersection categories.		
12	Produce mapping. % Tree Canopy Cover Entire Town % Tree Canopy Cover Urban Settlement Areas vs. Rural Areas % Tree Canopy Cover Public vs. Private Lands		
	Limitations LIDAR acquisition dates vary between 2016 and 2018 Above ground feature heights that the Tree Canopy is based on includes not only trees, but also buildings, hydro lines, bridge decks, large vehicles, and any other above ground features. Buildings are removed, however other features may remain but are a minor remaining component. MNR transmission lines and Halton Hills Hydro lines were reviewed for potential subtraction, however the location accuracy of these lines is not adequate to accurately subtract just these lines from the Tree Canopy dataset. A buffer of the lines would result in more valid tree canopy being removed than invalid. Considering these lines total ~662km (637km (Minor HH Hydro) 25km (Major)) in the Town, and a 1m buffer of these lines represents ~0.24% of total area in the Town, and ~ 0.35% of treed area in the Town, removing these features is not significant.		

## 6.3 Results

The tree canopy cover within the geographic boundary of the Town of Halton Hills is approximately 32%. Halton Hills tree canopy cover is relatively high when compared to other municipalities in southern Ontario where analysis has been completed. For example, compared to other lower tier municipalities in Halton Region, the Town of Oakville's tree canopy coverage is approximately 28% and the City of Burlington's tree canopy coverage is approximately 23%.

Tree canopy cover is not distributed uniformly across the Town. Canopy cover is affected by several different factors such as land use, development history, and existing protection measures in place. This also means that access to the benefits of trees is not equal across the Town.

Historically, the landform of the Niagara Escarpment presented physical challenges to clearing land for farming in rural areas. Consequentially, more accessible lands were cleared. Currently, the Niagara Escarpment Planning





and Development Act affords landscape level protection to natural systems, many of which include trees. In addition, the Halton Region Tree By-law regulates woodlands over 0.5 hectares. Approximately 87% of the Town's tree canopy coverage is located within rural areas.



Figure 6. Graph depicting percentage of tree canopy cover in rural and settlement (urban) areas

The remaining 13% tree canopy is located within urban settlement areas. Within these urban areas, mature residential neighbourhoods generally have higher average levels of canopy than industrial or commercial areas. In addition, mature residential neighbourhoods generally have more room for planting new trees when compared to more recent residential developments. A summary of tree canopy cover by ward is described in Table 27 and by community within the Town in Table 28.

Table 27. Tree Canopy Cover by Ward in Town of Halton Hills

Ward	Tree Canopy Cover
1	36.2%
2	32.3%
3	28.6%
4	22.0%

A review of the tree canopy coverage data by community within the Town of Halton Hills follows this general trend, with some of the highest tree canopy cover in more mature neighbourhoods combined with environmental protections such as Limehouse, Norval, and Glen Williams. Conversely, the lowest canopy cover is in the Premier Gateway which contains mostly industrial and agricultural land use.

Table 28. Tree Canopy Cover by Community within Town of Halton Hills

Community Name	Tree Canopy Cover
Acton	26.5%
Ashgrove	18.1%
Ballinafad	30.3%
Bannockburn	20.6%
Crewsons Corners	39.9%
Georgetown	24.5%
Glen Williams	43.0%
Henderson's Corners	36.2%
Limehouse	45.4%
Norval	44.1%
Premier Gateway	7.2%
Silvercreek	38.6%
Terra Cotta	38.5%





Another key difference in tree canopy cover distribution is between public and private ownership. Approximately 83% of the tree canopy cover within the Town of Halton Hills is located on privately owned land. The remaining 17% of the tree canopy is located on publicly owned lands which includes the Town of Halton Hills, Region of Halton, Province of Ontario, Credit Valley and Halton Region Conservation Authorities, Metrolinx, Utility Companies, the Federation of Ontario Naturalists, Bruce Trail Conservancy, and other public authorities having jurisdiction. For context, only 5% of the total tree canopy is located on Town-owned roads, parks, and facilities where the Town can directly manage trees.

Individual residents, businesses, and landowners jointly have the largest ownership in a shared natural asset that provides ecosystem services and well-being to the entire community. While managing the overall tree canopy is a joint effort across all Town departments, Halton Region, and conservation authorities working together, management of the largest component of the tree canopy relies on the actions of residents, businesses, and landowners. This reliance on individual actions required that we engaged the community frequently in the development of the privately-owned tree management strategy. Tree canopy cover mapping is attached to this background report as attachment 1, showing the entire tree canopy cover within the Town of Halton Hills and attachment 2, showing the breakdown of tree canopy cover on private land and public land.



# **Tree Canopy Mapping**





# **Tree Canopy Mapping Private-Public Ownership**

