

Community Forest Strategy

PREPARED FOR THE COUNTY OF BRANT

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EXECUTIVE SUMMARY

The County of Brant Community Forest Strategy provides a comprehensive, long-term framework to guide the protection, management, and expansion of the County's urban and rural tree canopy over the next ten years. As the County continues to grow and experience increasing climate-related pressures, the Community Forest is recognized as critical green infrastructure that supports biodiversity, climate resilience, public health, and overall community well-being.

The Community Forest encompasses trees and wooded areas across public and private lands, including parks, roadsides, cemeteries, woodlots, and trails. Current estimates indicate that total tree canopy cover across the County is approximately 24.7%, with higher coverage on County-owned lands (approximately 38.7%). However, existing datasets have notable limitations, particularly in their ability to accurately capture individual trees outside of mapped woodlands and to assess canopy distribution at finer geographic scales. As a result, the Strategy emphasizes the need for improved tree inventories and LiDAR-based canopy analysis to support evidence-based decision-making and long-term monitoring.

Extensive community and stakeholder engagement underpins the Strategy. Public surveys and workshops demonstrated strong support for expanding and protecting the Community Forest, alongside clear expectations for improved tree maintenance, stronger protection during development, and increased planting, particularly in urban and settlement areas. Engagement findings also highlighted gaps in public awareness of existing programs and policies, reinforcing the need for enhanced education, communication, and stewardship initiatives.

The Strategy establishes a clear vision for a sustainable, resilient, and inclusive Community Forest supported by five guiding principles: long-term resilience and planning, alignment with climate and sustainability goals, enhancement of community well-being, community engagement and stewardship, and alignment with broader regional and national environmental objectives. Five overarching goals guide implementation: planning for a growing forest, preserving trees on public and private lands, maintaining a healthy and safe forest, strengthening partnerships, and supporting recreation and complementary initiatives.

A core focus of the Strategy is implementation. It identifies priority operational needs, including proactive young tree care, risk management, planting logistics, pest and invasive species monitoring, and the development of a comprehensive GIS-



based tree inventory. To deliver these priorities effectively, the Strategy recommends strengthening staffing capacity, securing sustainable funding, leveraging grants and partnerships, and aligning forestry operations with asset management and climate action objectives

The Strategy also introduces forward-looking initiatives, including the development of a Woodland Strategy, heritage tree protection, exploration of forest certification or recognition programs, and the integration of tree equity into future planning. While current data limitations prevent a detailed tree equity analysis, the Strategy establishes a clear pathway to assess and address inequities in canopy distribution once improved datasets are available, ensuring that the benefits of the Community Forest are shared equitably across all communities.

Collectively, this Community Forest Strategy provides the County of Brant with a clear, actionable roadmap to safeguard existing tree assets, expand canopy cover, and embed trees and forests as foundational infrastructure supporting climate resilience, ecological integrity, and quality of life for current and future residents.



1. BACKGROUND

Spanning approximately 843 square kilometres in southwestern Ontario, the County of Brant encompasses both rural lands and several unique communities. As the County's population of 44,286 people (2024) continues to grow, and considering climate variability, it is increasingly important to manage natural assets such as the County's collection of both rural and urban trees, collectively referred to as the Community



Figure 1. Native Butternut tree (*Juglans cinerea*)

Forest. This Community Forest includes nine individual forest tracts, over 55 parks, street trees, and around 300km of recreational trails.

In 2022, the County of Brant's Forestry and Horticulture division of the Community Services Department was formed to implement a forestry program and oversee the Good Forestry Practices By-Law 70-21. Since this time, there has been a need to improve County of Brant arboricultural and forestry policies, standards, and practices to meet current and evolving industry standards. Policies and procedures that exist in most surrounding communities include tree protection during construction, compensation, replacement planting, tree maintenance schedules, woodlot management, and tree planting.

The County has recently developed several tree guidelines, policies and initiatives to better manage trees and forests within the County, including:

- Development of the Tree Protection Guide (2022);
- Updates to the Good Forestry Practices By-Law (2022);
- Implementation of the Tree Protection and Enhancement Policy and Technical Tree Guidelines (2025);
- Organizing community tree planting events;
- Managing invasive species, and
- Providing a subsidized tree program to residents.

While significant progress has been made, the development of a comprehensive forestry roadmap through the development of this Community Forest Strategy is essential to align the County of Brant with current industry standards and best practices in arboriculture and municipal forestry management.

1.1. Brant County Community Forest

The **Community Forest** includes trees, forests, and greenspace that make up the County's tree canopy. This includes, but is not limited to, trees located on or within roadsides, boulevards, parks, cemeteries, woodlots, and open spaces. Trees that comprise the Community Forest provide a number of research-backed benefits including:

- Contributing to biodiversity and providing wildlife habitat;
- Enhancing mental and physical health and well-being of residents;
- Providing shade and reducing urban heat islands;
- Preventing erosion;
- Improving infiltration and supporting water quality; and
- Sequestering carbon.

The County currently manages over 87.5ha of woodlots and is also responsible for the management of all County trees in parks, cemeteries, and along municipal roads. At present, the total number of trees under County management has not been fully quantified. To address this gap and support evidence-based decision-making, the County requires a comprehensive tree inventory on municipally owned lands in 2026-2027. This inventory will establish a baseline for monitoring tree health, guiding maintenance cycles, prioritizing planting, and tracking progress toward canopy and sustainability goals.

This **Community Forest Strategy (CFS)** has been developed to ensure the long-term health of Brant's urban and rural forests through preservation and planting. It is a community-focused vision with actions to guide the County in preserving, maintaining and growing the forest and natural heritage features. The intention of the Community Forest Strategy is to:

- **Engage** with partners and the community to increase public awareness and education that promote stewardship and community involvement.
- **Develop policies, strategic actions and recommendations** to protect, preserve and strengthen community forest health and biodiversity for long-term resilience.
- **Document and develop community sustainability initiatives** by ensuring that County forests are managed in an ecologically, socially, and economically sustainable manner.

- **Develop an ecosystem-based management approach** that will enhance forest health, habitat diversity, watershed values, public recreation, visual values, and protect public safety. To establish a framework for collaborative efforts across all divisions providing one vision and one approach for how trees on County lands are planned, protected, maintained and planted.
- **Promote human and community health and well-being** through equitable management and distribution of tree and forest related benefits, fair and safe access to and within green spaces and nature-based recreational opportunities.
- **Provide a framework for distribution of tree compensation funds** to further enhance objectives of the Community Forest Strategy and address the Council declared Climate Emergency.

Outcomes of this document include:

- **A 10-year strategy** to provide the County of Brant's Forestry Program (and other departments) with goals, objectives and standards to better manage Trees and Forests;
- **Direction for the creation of internal policies** and recommended **service delivery framework** and accountabilities relating to tree management for the County;
- **A long-term roadmap for the Forestry and Horticulture division** to enhance and distribute resources to increase service standards and improve community knowledge and participation in programs and initiatives that improve the environment; and,
- **Estimated budget needs and revenue streams** to offset costs for tree removal, maintenance and planting including the distribution of the County's Replacement Tree Reserve Fund, Capital Budgets, and Operating Budgets for staffing, tree maintenance, tree inventory, and reforestation.

This strategy is also intended to support the County's tree planting and canopy targets outlined in the Climate Action Plan (2024):

- **Plant 55,000 trees** throughout the County (public and private land) by **2035**.
- **Plant 110,000 trees** throughout the County (public and private land) by **2045**.
- **Increase tree canopy** on all County land to a minimum of **30% by 2050**.



1.2. Policy Context

1.2.1. County of Brant Policies

County of Brant Official Plan 2023 - A Simply Grand Plan came into full effect as of October 18, 2024, gives strong emphasis to the protection, enhancement, and strategic growth of its community forest as a critical component of its Natural Heritage System. The Plan integrates tree conservation within sustainable and managed growth objectives, calling on Good Forestry Practices to preserve natural heritage features, buffer against climate change, and provide social and environmental benefits. Street and park trees are treated as green infrastructure—supporting air and water quality, erosion control, cooling, and community wellbeing—and are subject to bylaws and developer obligations to ensure planting, maintenance, and replacement in new subdivisions. The Plan also establishes policy support for a County-wide Community Forest Strategy to guide stewardship, expansion, and long-term resilience of trees across public and private lands.

Some key elements of the plan relating to community forestry include:

- **Tree canopy cover target of 30%** for the county: This will be achieved through the conservation of existing woodlands, growing the tree canopy and replacing trees when they are injured or destroyed. This target is based on the Science-based guidelines from Environment Canada's How Much Habitat is Enough
- **Green Infrastructure Integration:** The plan emphasizes the enhancement of natural and urban greenspaces, ensuring trees and vegetation play a critical role in climate resilience and improving community aesthetics.
- **Tree Protection and Planting:** The Plan supports tree preservation through Good Forestry Practices, requiring developers to conserve and replace trees during development and subdivision approvals.

The Good Forestry Practices By-Law is designed to conserve and enhance the health of the County's natural heritage areas by regulating tree cutting and promoting sustainable forest management. It aims to prevent clear-cutting, improve climate resilience, protect air and water quality, aesthetics, and community well-being. A Good Forestry Practices Permit, including a silvicultural prescription by a qualified forester, is required for tree harvesting on woodlots 0.2 ha or greater, while more extensive tree removal that is not prohibited may require a permit through other approval processes. Housekeeping updates to the Good Forestry Practices By-Law have been implemented since 2022.

The Tree Protection and Enhancement Policy was created in the spring of 2025 to provide residents, developers, consultants, and internal staff with a guide on how trees should be considered, protected, maintained and/or compensated for if removed. The policy also recognizes trees as critical green infrastructure assets and incorporates



arboricultural best practices, proactive tree maintenance principles, and long-term canopy sustainability into decision-making. This policy was passed in council and took effect on May 27th, 2025. Its purpose is to provide clear direction during planning and permitting processes, particularly for projects that may impact trees on or near the development site. The policy establishes the requirement for an inspection and/or Tree Protection Plan to be submitted to the County before any construction begins, ensuring that both County-owned and privately-owned trees are assessed for potential impact if located on or adjacent to a project site.

The Tree Protection Plan must include several components: an Arborist Report identifying which trees will be removed or retained, a Tree Inventory with a map showing protection zones and mitigation strategies (such as travel corridors and grade changes), and the plan itself overlaid on a current property survey. The policy also outlines technical requirements such as minimum tree protection distances, installation of physical barriers and signage, and the presence of an on-site arborist where required. The policy further states that the Technical Tree Guidelines govern all works on, or around, protected trees within the County of Brant and shall be referenced for all matters relating to trees, including but not limited to tree preservation, tree protection, tree planting details, tree inventory, arborist reports, tree selection, tree pruning, tree removal, and tree compensation. Collectively, these requirements aim to ensure consistent and effective tree preservation throughout development projects in the County.

The Technical Tree Guidelines, developed in 2024, serve as a comprehensive manual to implement the County's Tree Protection and Enhancement Policy. They function as the governing technical document for all works on, or around, protected trees within the County of Brant. These guidelines provide technical direction for tree planning, maintenance, protection, and enhancement throughout the County's developed and developing lands. The document outlines standardized practices for tree pruning, planting, risk assessment, and maintenance for County-owned trees, including boulevard and park trees. It also emphasizes the critical importance of root zone protection and soil quality, provides spacing and species selection requirements, and includes detailed instructions for tree planting, including acceptable soil mixes and warranty periods.

The guidelines detail tree protection protocols during development, requiring Tree Inventory and Protection Plans (TIPPs) for any construction near protected trees. These guidelines mandate Tree Protection Zones (TPZs) based on tree size and species, prohibit damaging activities within these zones, and describe acceptable root excavation and pruning techniques. Compensation policies for tree removals, including replacement ratios and cash-in-lieu provisions, are also included. Plans such as Arborist Reports, Street Tree Plans, and Compensation Plans must be submitted and approved by County staff. The guidelines apply to County capital projects, development applications, infrastructure works, and private landowners, and will be reviewed every



five years to remain current with industry best practices and municipal planning standards.

The Technical Tree Guidelines have been used as a basis to develop some of the recommendations around forest operations in this strategy, ensuring alignment between policy, technical standards, and long-term community forest management objectives.

The County of Brant Climate Action Plan, approved in November 2024, sets explicit commitments to enhance the local tree canopy as part of its broader climate strategy. Key targets include planting 55,000 trees by 2035 and 110,000 trees by 2045 on both public and private lands, as well as increasing total tree canopy on all County land to at least 30% by 2050. These goals form part of a larger set of ten measurable targets aimed at reducing greenhouse gas emissions, improving energy resilience, and fostering environmental sustainability. Implementing a “Community Forest Strategy” and nature-based initiatives within County operations are among the actions laid out to deliver these targets.

To engage residents directly, the County supports a wide range of tree planting programs and educational outreach under its Community Climate Action initiatives. Under the County banner of “Brant Plants” partnerships are forged to encourage homeowners, businesses and community groups to participate in initiatives such as community planting events, environmental stewardship of designated parks, and subsidized tree sales. These efforts are framed to improve air quality, reduce urban heat islands, support wildlife habitats, and manage stormwater—demonstrating a strong link between tree canopy enhancement and broader climate resiliency goals.

The Climate Action plan contains 50 Action items that span around seven themes including: Buildings and Infrastructure; Transportation; Nature; Waste; Economic Development and Tourism; Safety and Emergency Preparedness; and Data, Outreach, and Education. The Nature theme contains 9 action items, some that are directly tied to the community forest. These action items have been reviewed and incorporated into the recommendations of this report to ensure consistency with related policies.

1.3. Existing Tree Canopy Cover

An assessment completed as part of the County of Brant’s Climate Action Plan (2024) using i-Tree Canopy estimated that approximately 24.7% of all land within the County (public and private) is covered by tree and shrub canopy, with approximately 39% canopy coverage on County-owned lands. This analysis includes woodlands, individual trees, and linear canopy features (such as street trees and rural tree cover) and represents the most comprehensive estimate of total tree canopy cover currently available for the County.



To further inform this Strategy, Dougan completed a GIS-based assessment of existing woodland canopy coverage **using provincial and County woodland spatial datasets**, including Ministry of Natural Resources treed area mapping and the County of Brant Natural Heritage Woodlands layer. These datasets are important for understanding the distribution and extent of larger forested areas and natural heritage features across the County; however, they do not capture individual trees outside of mapped woodland polygons and have not been refined using current aerial imagery or LiDAR. Please refer to **Map 1** for a visual representation of this data.

The tables below provide an estimate of existing woodland canopy cover within the County based on currently available spatial datasets (Tables 1 and 2). It should be noted that the datasets were not reviewed for quality control or refined using current aerial imagery and do not include trees located outside of mapped woodland areas. As such, the woodland canopy values presented are intended to provide contextual information only, include only a subset of the overall canopy cover within the County, and should not be interpreted as total tree canopy coverage.

As part of the implementation of this Community Forest Strategy, the County intends to refine and update woodland canopy mapping through LiDAR-based analysis, anticipated in 2026/2027. This future work will support improved accuracy, enhanced forest condition assessment, long-term monitoring, and adaptive forest management.

Table 1. Woodland Canopy Coverage Based on Existing Spatial Datasets¹.

Data Source	Tree Canopy Cover (ha)	Tree Canopy Cover (%)
MNR Woodlands	13624.90	16.5%
County Woodlands	15001.37	18.2%
Total	15578.37	18.9%

¹ Woodland canopy values are based on existing polygon datasets and have not been refined using LiDAR or current aerial imagery. These values are considered preliminary and are expected to be updated through future LiDAR-based analysis. Data sources include MNR (Ministry of Natural Resources) treed area mapping and County of Brant Natural Heritage Woodlands



Total tree canopy coverage is further broken down in Error! Reference source not found. which summarizes the tree canopy coverage within County-owned lands and Settlement Areas within the County, including woodlands.

Table 2. Tree Canopy Coverage by Land Category and Data Source in the County of Brant

Land Category	Data Source	County-wide Tree Canopy Cover (%)	Interpretation
Woodlands (Public and Private)	MNR / County Woodland Datasets	18.9	Woodland canopy only
County-Owned Lands	i-Tree Canopy (2023)	38.7	Total canopy on County lands
County of Brant – Total (All Lands)	i-Tree Canopy (2023)	24.7	Total tree canopy cover

Based on existing woodland spatial datasets, **woodland canopy coverage within the County is estimated at approximately 18.9%** (Table 1). Within this dataset, woodland canopy represents approximately 32.3% of County-owned lands, 11.4% within the County’s Settlement Areas, and 19.5% within rural areas outside of Settlement Areas. These values reflect woodland canopy coverage only and do not include individual trees located outside of mapped woodland areas.

When considering total tree canopy cover, including woodlands and individual trees across all land uses, the County-wide canopy coverage is estimated at 24.7% based on i-Tree Canopy analysis (Table 2).

2. COMMUNITY, STAKEHOLDER, and RIGHTHOLDER ENGAGEMENT

2.1. Scope of the Engagement

The County of Brant undertook multiple **community engagement initiatives** to inform its Community Forest Strategy. These activities were designed to ensure the Strategy is **community-driven, inclusive, and reflective of shared priorities** around the community forest, climate adaptation, and resilience.

The engagement included an **in-person workshop** held on May 15, 2025, and an **online public survey** running from April 24 to May 16, 2025.



The in-person workshop brought together targeted community groups, government, and industry representatives for facilitated discussions around shared values, benefits of urban and rural forests, perceptions of challenges and opportunities for tree care and forest management, and priorities for planning and management activities.

The survey, offered online, in print at County offices, and by phone, was part of a wider community engagement effort to gather broad input from all community members on support for the vision and plan, awareness and understanding about current tree and forest programs, and potential areas of concern.

Six Nations of the Grand River and Mississaugas of the Credit First Nation requested this draft Community Feedback be circulated to them as part of the consultation process, and the comments be incorporated into the Final Draft that will be presented to Council.

2.2. Findings and Feedback

2.2.1. Public Survey

The public survey was promoted through paid social media ads, email outreach via the Engage Brant and Brant News webpages, posters in community centres, and a promotional video. In total, the survey garnered 192 responses, and in general captured strong community interest and support for the Strategy's vision, with findings also highlighting potential knowledge and educational gaps related to forest management activities, tree protection, and maintenance.

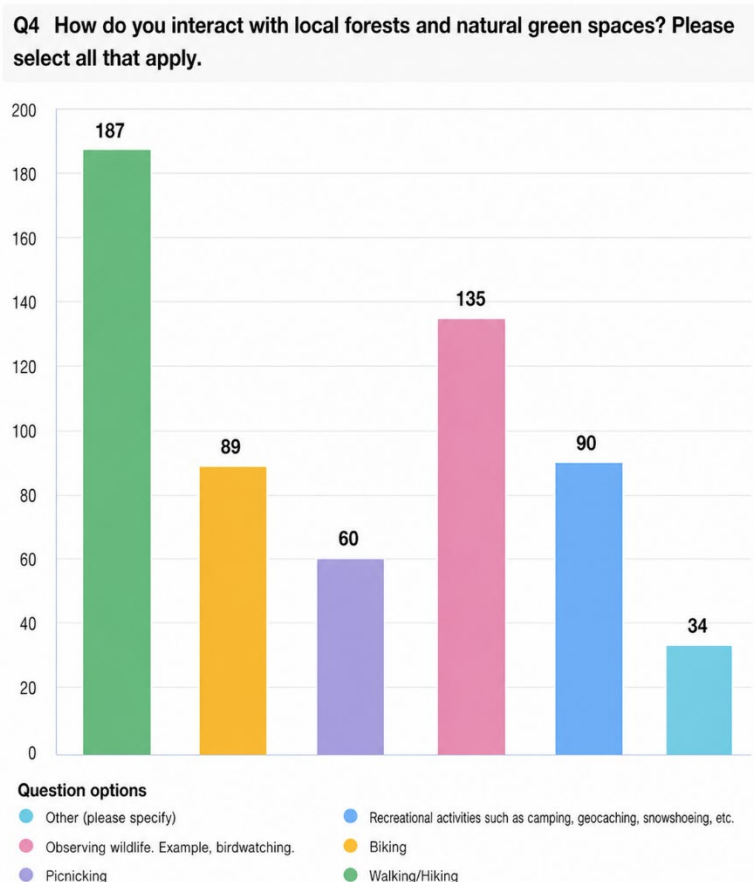
Key results:

- **87% of respondents agreed or strongly agreed** with the Strategy's **goals**.
- **82% expressed interest in engaging in stewardship activities** such as tree planting and citizen science.
- **71% agreed or somewhat agreed** that trees in the County are **healthy**
- **29% did not agree** that tree issues are adequately managed.
- **66% of respondents** supported specific tree care programs such as proactive inspections, new tree pruning, mulching/fertilizing, and pest control.
- **14% feel enough trees are planted annually**, and **73%** think that tree canopy coverage is lacking in all areas, especially in new subdivisions.
- **48% disagreed that the County does enough to protect trees**, suggesting a perception that current policies or enforcement may not be sufficient to prevent canopy loss, or a lack of clarity on what protections currently exist.

According to survey participants, the areas of highest priority for the County include **protecting existing natural areas, planting urban street trees, and restoring natural areas**; these align strongly with the summary of key interactions with forests and green spaces identified by community members:



Depicted below, in Figure 3, is a summary of key activities and interactions that survey respondents indicated they participate within local forests and natural green spaces. “Walking/hiking” and “wildlife observation” ranking highest and “picnicking” ranked lowest.



Participants were also provided the opportunity to submit open-ended feedback, highlighting a strong interest in **protecting and preserving natural areas** alongside prioritizing **native species and ecosystems**. A key concern that emerged related to **development pressures** and the need to balance urban development and housing needs with **green space** preservation and creation.

"We have lost so many trees to development! It should be mandatory for developers to plant a tree in front of every house they build."

"There should be stricter penalties for people removing trees... My neighbour deforested his entire lot."

Survey respondents

"Plant rare native trees on urban and rural streets and roads."

"Ensure all trees planted are native to Ontario."

Survey respondents

2.2.2. Community Workshop

The workshop's purpose was to gather detailed insights on community forest benefits, challenges and opportunities, and perceived areas of priority from a diverse group of stakeholders to ensure the Strategy reflects local contexts and expertise. The workshop was attended by **20 participants**, representing community groups, conservation authorities, industry and forestry professionals, developers, and the County.

Community Forest Benefits

Participants consistently emphasized the importance of **preservation and biodiversity**. Protecting existing natural areas and maintaining healthy, diverse forest landscapes were seen as critical, as participants also noted the importance of **managing for invasive species** (such as phragmites and Japanese knotweed), **maintaining native habitats** (including woodlots and riparian areas), and **integrating green spaces** in both urban and rural planning.

There was also clear recognition of the role that trees and green spaces play in fostering **community well-being** by enhancing **aesthetics**, providing spaces for **recreation** and relaxation, and supporting social connection and community identity. In addition to recreation and social cohesion, participants also brought forward opportunities to connect **food production** and **agriculture** to the community forest through **community orchards**.

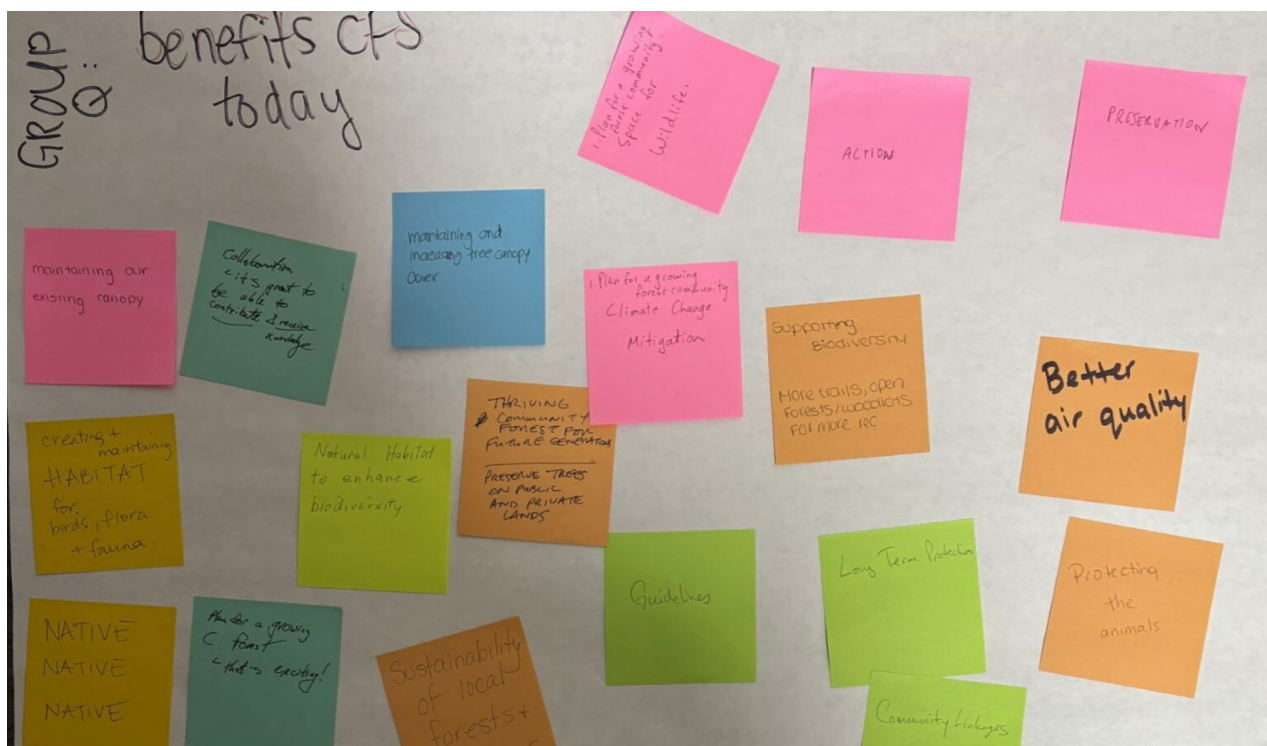


Figure 2. Brainstorming activities to identify key forest benefits as perceived by workshop participants.

Management and Area Priorities

Based on a mapping exercise, workshop participants identified several key geographic and management priorities, including:

- **Roadsides and streets** as potential green corridors to promote ecological connectivity.
- **Waterways, floodplains, and steep slopes** for erosion control, habitat protection, and stormwater management.
- **Farmland areas**, particularly for planting riparian buffers along creeks and waterways, and for planting hedgerows and shelterbelts.
- **Woodlots** as critical areas for biodiversity, especially with a focus on managing invasive species and protecting natural areas.
- **Urban neighbourhoods and commercial/industrial properties** to address the urban heat island effect and create more resilient community spaces.



Figure 3. Mapping activities to identify key forest management priorities and areas.

Challenges and Opportunities

Participants anticipated several **challenges** that could affect the successful implementation of the Vision and Strategy:

- **Lack of funding** for both initial planting efforts and long-term maintenance. Participants highlighted the need for sustained financial support and resources, especially for invasive species management, ongoing tree care, and partnership building.
- **Competing land uses, priorities and development pressures**, especially in rapidly growing areas where development may take precedence over preserving or enhancing tree cover. In a similar vein, participants noted difficulties in identifying **available land** for new plantings, especially in built-up urban areas or where farmland is actively managed.
- **Lack of education around tree and forest benefits**, as well as public perception (e.g. “NIMBY-ism”), could act as barriers to public support and stewardship. For example, different stakeholders may not fully understand the importance of tree and forest conservation, native species, or proper planting practices., which can limit buy-in and lead to misunderstandings about ecosystem benefits and long-term commitments required.
- While planting is important, **ongoing care** such as watering, pruning, and monitoring, is essential for long-term forest health. Concerns about **maintenance costs** (particularly over the long term) and capacity for effective monitoring were frequently mentioned.

Looking to the future, participants envisioned **healthier, more diverse urban and rural**

community forests that provide shade, beauty, and natural habitat while strengthening community pride and identity and underpinning climate adaptation and resilience. Participants emphasized the value of **establishing a dedicated stewardship council or similar coordinating body** (e.g. volunteer board) to avoid silos, share knowledge, and ensure that community priorities remain central throughout implementation. In the longer term, **public volunteers** could also act as stewards or “Tree Champions” to ensure successful Vision and Plan implementation. Ongoing **public education efforts** and **transparent communication will be essential** to bridge knowledge gaps and build trust.

2.3. Key Messages

The community engagement process revealed strong support for the County’s forest strategy vision, while also identifying key gaps, opportunities, and areas requiring targeted action. Three cross-cutting themes emerged:

1. **A shared forest vision must bridge both urban and rural priorities.** Brant County’s forest landscape is uniquely positioned at the intersection of rural and urban contexts, each with distinct needs, uses, and values. This duality was reflected in both the mapping activities and open-ended feedback from workshop participants. Urban residents may prioritize green infrastructure, street tree planting, and urban heat mitigation, while rural stakeholders may emphasize agricultural integration, woodlot preservation, and riparian buffer restoration. Coordinated planning across sectors (e.g. conservation, development, agriculture) and jurisdictions will be essential to avoid siloed efforts and ensure nature-based benefits are distributed equitably across the landscape.
2. **There is a significant need for public education, outreach, and accessible program information.** Survey data revealed that while community members overwhelmingly support the strategy’s goals and want to participate in stewardship, many are unaware of existing County programs and many disagreed that the County does enough to protect trees. This highlights a communications and knowledge gap that must be addressed. Clear, continuous public engagement and education efforts, in some cases tailored to different audiences and stakeholders, will help build awareness, foster stewardship, and reinforce transparency.
3. **A flexible, multi-partner approach to stewardship can generate significant co-benefits.** Emerging from the community engagement workshop was the notion that no single model for tree planting, ecological restoration, stewardship, and funding will fit all landowners or contexts within the municipality. Instead, a mosaic of models, which may include voluntary, incentive-based, and regulatory approaches, will be needed to reflect differing land ownership, stakeholder capacity, and motivation. Identifying relevant



funding opportunities and formalizing partnerships across sectors and stakeholders, and developing tools for collaboration (e.g. stewardship councils, collaborative efforts with like-minded agencies and, public-private partnerships) can help scale impact, reduce costs, and support long-term maintenance. Participants also called for a focus on ongoing care and monitoring, not just initial planting, to ensure long-term forest health and climate resilience.

4. **The recognition and protection of Treaty and Indigenous Rights must be foundational to the Forest Strategy.** The Mississaugas of the Credit First Nation (MCFN), as Treaty Holders under the Between the Lakes Treaty No. 3 (1792), have asserted that their Indigenous and Treaty Rights may be impacted by projects undertaken as an outcome of the CFS. Ongoing, meaningful engagement will be required, including notification of all project updates and opportunities to review and participate in environmental and archaeological assessments. Ensuring that consultation is continuous, responsive, and adequately resourced, including the potential provision of capacity funding, will be critical to respecting MCFN rights and advancing aspects of the CFS responsibly.

3. STRATEGY FRAMEWORK

The Community Forest Strategy has been developed based on the vision, guiding principles, outcomes, objectives, strategies and actions outlined below. This framework was established in consultation with the County's Forestry and Horticulture division, and through feedback gained from the Community and Stakeholder engagement outlined in section 2.

3.1. Vision

The Community Forest Strategy aims to create a **sustainable, inclusive, and resilient network** of forests and green spaces that contributes to the **economic, environmental, and social vitality** of the County of Brant. It seeks to **balance** environmental preservation with development, ensuring a **legacy** of a thriving community forest for **future generations**.

3.2. Guiding Principles

3.2.1. Long-Term Resilience + Planning

Healthy and connected green spaces are vital for improving **air quality, regulating temperatures, and supporting biodiversity**. Expanding tree canopy cover and ensuring the health of community forests contribute to **resilience against climate**



change, as well as creating more **livable communities**. This aligns with the County of Brant's goal to enhance natural areas and promote biodiversity through better land-use planning and integration of nature within urban settings and development projects.

The County's Tree Protection Guidelines emphasize the necessity of **proactive, forward-thinking** forest management practices that anticipate and respond to emerging challenges. These include threats from invasive species, the pressures of urban expansion, and the escalating impacts of climate change.

Building long-term ecological resilience into the fabric of Community Forest planning ensures that green infrastructure can adapt to and recover from future environmental stresses. This guiding principle reflects the County's broader commitment to sustainability and strategic foresight, ensuring that the forest canopy continues to thrive alongside responsible community development. By integrating resilience as a foundational element, the County is better equipped to **safeguard natural assets for future generations**.



Figure 4. Red Maple (*Acer rubrum*)

3.2.2. Alignment with Environmental Sustainability Goals

The County of Brant has made clear commitments through its Climate Action Plan and other environmental policies. Community forests play a direct role in meeting these targets by helping to reduce emissions, managing stormwater, and supporting biodiversity. This strategy supports the County's sustainability goals by advancing **nature-based solutions** that align with climate adaptation and ecological resilience. By enhancing the health and extent of the community forest, the County contributes meaningfully to its climate commitments and supports the **restoration and protection of natural systems**.

3.2.3. Enhancing Community Well-Being

Access to forests and green spaces enhances **physical and mental health** by encouraging outdoor activity and **connection to nature**. As reflected in the County's Recreation Master Plan, access to nature improves physical health, reduces stress, and strengthens community bonds. The Community Forest creates **inclusive spaces** where residents of all ages and backgrounds can connect with nature, engage in recreation, and build social ties while attracting families, businesses, and visitors to the County. This guiding principle highlights the dual role of community forests in conservation and community building. It supports a balanced approach that protects ecological values while enhancing public access and enjoyment. Ensuring that green spaces remain safe,



welcoming, and accessible is key to fostering **community resilience** and overall well-being.

3.2.4. Community Engagement + Stewardship

Effective forest management depends not only on government leadership but also on the active participation of residents, community organizations, Indigenous partners, and local stakeholders. The County's strategy embraces a **collaborative and inclusive approach** that empowers communities to take part in **stewardship efforts**. Through public education, volunteer programs, and participatory decision-making, the County fosters a sense of **shared responsibility** for the care and protection of its community forest. This principle aligns with the County's broader planning objectives, which prioritize shared responsibility and grassroots involvement in ecological stewardship. A vision that centers around inclusivity and collaboration ensures the community forest strategy is embraced and **sustained over the long term**.

3.2.5. Support for Broader Regional + National Goals

This strategy positions the County as a **leader in environmental responsibility** by aligning with regional and provincial initiatives, including Ontario's Climate and Biodiversity strategies; and supports federal commitments under the UN Sustainable Development Goals. By developing a resilient and connected community forest network, the County is contributing to collective efforts aimed at **climate adaptation, biodiversity conservation, and sustainable land use planning**. This alignment elevates the County's role as a proactive leader in environmental governance, reinforcing its commitment to building climate-resilient communities while fulfilling its responsibilities within a larger ecological and policy context.

3.3. Goals + Objectives

The following Community Forest Strategy goals and objectives align with the Vision and support the County of Brant's broader planning goals by prioritizing sustainability, community health, and inclusivity. By addressing environmental preservation, recreational needs, and climate adaptation, the Community Forest Strategy serves as a key framework for achieving a **greener, more resilient, and community-oriented future**.

The alignment of these objectives with the County's existing policies ensures a cohesive approach to meeting current and future challenges. For each objective, examples of actionable strategies are provided.



3.3.1. Plan for a Growing Community Forest

Actionable Strategies:

- Collect and maintain high-quality community forest data including the County-wide tree inventory currently underway
- Integrate community forest data with asset management frameworks
- Create a framework for monitoring and evaluating the health of the community forest and associated programs.

3.3.2. Preserve Trees on Public + Private Lands

Actionable Strategies:

- Implement, and where feasible, improve public tree protection and replacement through established policies.
- Implement programs to preserve, maintain and monitor veteran trees on private lands
- Implement a heritage tree program
- Strengthen tree protection and replacement policies
- Investigate provision of incentives on public and private lands
- Protect natural spaces through active policy and procedure implementation

3.3.3. Maintain + Enhance a Healthy, Safe and Functional Community Forest

Actionable Strategies:

- Provide ongoing training and professional development to ensure staff are up to date on best practices in community forestry, tree risk assessment, and invasive species management.
- Enhance equipment and resources by investing in modern equipment (e.g., trucks, chippers, watering units) to improve efficiency and safety.
- Establish a dedicated budget line for forestry operations and maintenance, ensuring predictable funding for routine and preventative work.
- Where there is overlap in departmental jurisdiction, develop a mandate that requires qualified forestry staff to be responsible for community forest management decisions, such as roadside tree maintenance in boulevards and municipal right-of-ways.
- Strengthen staffing capacity by hiring additional forestry staff to meet future in-house operational needs in concert with municipal growth.
- Proactively manage tree related risk through inspections and re-allocation of funds from hazard tree maintenance activities to proactive tree management
- Allocate resources to meet best management practices and climate action goals



- Develop a framework for distribution of tree compensation funds to further enhance objectives of the Community Forest Strategy and address the council declared Climate Emergency.
- Enhance capacity to respond to threats to the community forest.
- Continue to improve the health and connectivity of community forests and other green spaces through diversification, and increasing tree canopy cover across the County
- Improve tree establishment outcomes by introducing proactive early establishment protocols and maintenance programs
- Pursue community forest equity for all community members through strategic planting plans, targeted partnership opportunities and incentive implementation.

3.3.4. Strengthen Partnerships + Collaboration

Actionable Strategies:

- Continue to secure sustainable funding by exploring external funding streams such as provincial/federal grants, Tree Canada programs, and partnerships with conservation authorities.
- Pilot cost-sharing programs with developers, schools, and community groups for planting and stewardship initiatives.
- Build community capacity by leveraging volunteer programs (e.g., Adopt-a-Tree, community planting days) to support lower-skill tasks like mulching and watering.
- Develop communication tools to showcase the value of forestry services, linking investment in trees to, climate resilience and quality of life. Showcase how low-impact development infrastructure enhances the environment.
- Actively involve residents, local organizations, and stakeholders in the planning, implementation, and stewardship of the community forest.
- Educate the community on the benefits of community forests and empower citizens to contribute and participate in conservation efforts.

3.3.5. Support Recreational Opportunities + Other Initiatives

Actionable Strategies:

- Continue to develop accessible and safe outdoor spaces that encourage physical activity and foster connections with nature and support “complete communities” as outlined in the Official Plan.



- Balance recreation with conservation to ensure the sustainability of natural resources, aligning with the County's Recreation Master Plan (2017) and Trail Master Plan (2017)

3.4. Strategies + Actions

3.4.1. Planning

Capacity Building

The County's growing community forest represents a valuable public asset, offering essential environmental, health, and economic benefits. However, current staffing and resource limitations are severely constraining the Forestry team's ability to carry out even foundational management tasks such as mulching, pruning, and monitoring needed to sustain these benefits. This gap between operational capacity and community expectations poses long-term risks to tree health, resident satisfaction, and overall program effectiveness.

At the same time, there is a clear mandate from both residents and Council to prioritize green space protection, expand the urban canopy, and support climate resilience through proactive tree management. To responsibly meet this mandate, the strategy must address two core issues:

- Capacity building and prioritization; and
- Fiscal responsibility and program sustainability.

It should be noted that each year, the County invests in planting between **1,000 and 3,000 trees** on County property and **subsidizes the purchase of 800 trees** for plantings on private property (CAP, 2024); this is in addition to other plantings that are undertaken by County partners such as the GRCA. The County was also recently successful in receiving a tree planting grant through the **Growing Canada's Community Canopies (GCCC)** obtained in summer 2025 which will fund plantings in parks and cemeteries in fall 2025 and spring 2026.

Focusing on grants and developing strategic partnerships will be critical in the implementation of this strategy.

This strategy identifies a core set of high-impact management tasks that the Forestry team can realistically deliver, given current constraints. Several of these tasks are already being delivered in whole or in part under the County's existing forestry operations; however, this framework formalizes, prioritizes, and aligns those efforts to ensure consistent delivery, accountability, and long-term sustainability. These tasks, as informed by the County's Forestry and Horticulture Division and engagement feedback, are summarized in Table 3 below.



Table 3. Core capacity framework for Community Forest Management priorities.

	Priority Area	Core Task	Why It Matters
1	Young Tree Care	Mulching, watering, stake removal, structure pruning, soil amendments	Ensures survival of new plantings; maximizes past investments
2	Risk Management	Routine inspections and responding to hazard trees. Preventative maintenance (block pruning) and inspection cycles	Public safety, liability prevention
3	Planting Logistics	Tree planting in priority areas	Fulfills canopy goals and climate adaptation targets
4	Inventory Maintenance	Arborist to complete and update the community forest tree inventory using a GIS-based system annually; Evaluate tree canopy coverage every 3-5 years	Supports decision-making, budgeting and tree equity
5	Pest & Invasive Species Monitoring and Management	Identify priority areas for invasive species monitoring and management using remote sensing. Monitor for new pest infestations such as Emerald Ash Borer, Spangly/(LDD) Moth (Lymantria Dispar Dispar) moth, Dutch Elm Disease, etc.	Early detection avoids costly removals and spread
6	Service Requests	Respond to public concerns/inquiries	Maintains public trust and transparency
7	Stewardship & Volunteers	Engage public in watering/mulching/	Extends capacity and builds ownership

	Priority Area	Core Task	Why It Matters
		invasive species management	
8	Education & Outreach	Basic signage, newsletters, public events related to the Community Forest health and maintenance	Builds understanding, volunteer skills and support for realistic service levels
9	Development Review Input	Provide guidance on tree protection plans and roadside tree inventory and management, conduct quality control checks and warranty inspections	Prevents loss of canopy during development and success of post-development planting
10	Monitoring Success Metrics	Develop and implement an online tree inspection system and database	Informs future budget asks and grant applications

Recommendation: To ensure effective delivery of community forestry services and safeguard the County's tree assets, it is recommended that the County expand the current forestry team comprised of one (1) Forestry Supervisor and one (1) Arborist in concert with growth of the municipality. This expansion would assist with the implementation of policy and climate action objectives and provide a level of service consistent with industry standards and arboricultural best practices as operational needs grow. The additional capacity would support increased in-house operations and the delivery of essential forestry functions that are included in Table 3.

Fiscal Responsibility and Program Sustainability

A transparent and strategic approach to managing green infrastructure is essential to justify future investment. The County must balance community demand with realistic budget planning. This includes:

- Exploring grant funding (e.g., through Tree Canada, FCM, Green Municipal Fund)
- Resource sharing across departments (e.g., equipment sharing, multidisciplinary staff)
- Investigating cost-sharing partnerships with developers, schools, and community groups

- Leveraging volunteer and stewardship programs to support lower-skill tasks like mulching and watering
- Regularly reporting on outcomes and value delivered (e.g., avoided stormwater costs, carbon sequestration)
- Implementing approved policy direction as outlined in the Development and Engineering Standards, Official Plan, Parks Master Plan, Recreation Master Plan and Trails Master Plan

This focused approach allows the County to maintain its existing community forest assets, demonstrate fiscal stewardship, and create a foundation for long-term growth of the forestry program. Relevant grant funding and cost-sharing programs that could be leveraged by the County to assist with offsetting internal costs are summarized in Appendix B.

Recommendation: *Expand contributions to existing partnerships and funding programs that are working well (i.e. Brant Grow Green) while exploring new funding, cost and resource sharing, and partnership opportunities to develop a sustainable funding and delivery model that balances community demand for tree planting and maintenance with fiscal realities. Further develop the compensation policy in the County of Brant Technical Tree Guidelines to apply to internal departments within the County. Develop guidelines for the **Canopy Reserve Fund** that tracks the compensation funding to ensure that it is earmarked for tree planting initiatives only.*

Street Tree Inventory

A comprehensive inventory of existing assets is a critical first step in establishing planting and maintenance priorities. The County's existing tree canopy datasets should be reviewed for gaps and priority areas for inventory should be identified.

As of December 2025, the County has inventoried approximately **3500 trees** (of over an estimated 20,000 trees) located within and outside of the following Settlement Areas. Staff aim to complete a full inventory in 2026/2027 utilizing the new Arborist position (2025)

- | | | | |
|---------------|--------------------|------------------|------------|
| • Burtch | • Harrisburg | • Oakhill | • Kelvin |
| • Glen Morris | • Paris | • Mount Pleasant | • Harley |
| • St. George | • Oakland | • Onondaga | • Cathcart |
| • Gobles | • Muir | • Falkland | |
| • Cainsville | • Scotland | • New Durham | |
| • Middleport | • Fairfield Plains | • Burford | |

Exploring the use of advances in technology such as remote sensing using high resolution orthoimagery, hyperspectral/multispectral imagery would help to provide broad scale monitoring. For example, canopy cover across the entire County could be



modeled using AI/machine learning algorithms trained on local data that validate remote sensing datasets such as aerial photos, satellite imagery, and LiDAR. This approach would help fill gaps in the existing inventory, particularly in densely planted or natural areas.

In addition to desktop-based inventory approaches, traditional inventory approaches should be implemented. It is recommended that a more comprehensive inventory be undertaken focused on **publicly owned street trees in settlement areas**. Data collected during a comprehensive tree inventory should include the following attributes at a minimum:

- **Tree ID:** A unique identifier for each tree.
- **Species (Common and Botanical Name):** Scientific and common names.
- **DBH (Diameter at Breast Height):** Measured at 1.4 m above the ground in centimeters.
- **Ownership:** Private, public, boundary.
- **Health, Structure, and Overall Condition:** Good, Fair, Poor, or Dead.
- **Location:** GPS coordinates or GIS point; may also include address or park/block ID.
- **Maintenance or Management Completed:** Date and type of management action (e.g., prune, removal, replacement, pest control, stake removal, inspection).
- **Maintenance or Management Recommendations:** Immediate or scheduled (e.g., prune, removal, replacement, pest control, stake removal, inspection).

Recommendation: *The County should develop and maintain an up-to-date GIS-based inventory and inspection system for new plantings, removals, pruning and maintenance actions that is fully accessible to all relevant departments (i.e. Parks, Forestry, Planning, etc.) using GIS; similar to [Haldimand County's Tree Inventory Map](#). A full inventory of County owned trees in settlement areas and rural roads should be undertaken (i.e. using GIS modeling supplemented with targeted field verification) and updated annually. The County may wish to adjust the frequency of re-inventory based on factors such as development intensity, pest/disease pressures, and budget and staffing capacity. Trees at risk of becoming hazardous, and those located in high-traffic areas should be inspected more frequently. Tree canopy coverage should be evaluated every 3-5 years.*

Woodland Strategy

The County should prepare a comprehensive Woodland Strategy to guide the long-term conservation, enhancement, and management of County Forest Tracts, and

natural areas. A dedicated strategy will establish clear goals, policies, and implementation tools to protect existing woodlands while identifying opportunities for restoration and expansion. The scope of the strategy should include an inventory of existing woodlands, establishing canopy and woodland cover goals aligned with County climate and biodiversity commitments, integration with policy, and establish a management and monitoring framework.

Recommendation: *The County should prepare a comprehensive Woodland Strategy to guide the long-term conservation, enhancement, and management of its woodland resources.*

Heritage Tree Protection and Enhancement

Heritage trees are living landmarks that contribute to the County's natural and cultural identity. These trees often have exceptional size, age, historical significance, or ecological value, and serve as important community touchstones and connections to Indigenous traditions, stories, and ancestral knowledge. However, without specific recognition or protection measures, heritage trees can be vulnerable to removal, neglect, or damage particularly in the face of development, infrastructure work, or changing land use.

Building on the Heritage Tree Designation and Protocol included in the County's Technical Tree Guidelines, the County should develop and adopt formal **Heritage Tree Protection and Enhancement Guidelines** that:

- **Define criteria** for identifying heritage trees based on factors such as age, species rarity, size, historical, cultural or Indigenous significance, and ecological function;
- **Establish a nomination and designation process**, allowing residents, community groups, or staff to propose trees for recognition;
- **Create a registry** of designated heritage trees, including documentation of location, condition, and significance;
- **Include protective measures** during planning, development, or infrastructure work to prevent harm or unnecessary removal;
- **Promote stewardship and awareness**, encouraging landowners and community members to care for heritage trees through education and potential incentives;
- **Integrate with planning tools**, such as the Official Plan and Heritage mapping layers, to ensure long-term protection.



By formally recognizing and protecting heritage trees, the County can preserve these irreplaceable assets for future generations while reinforcing its commitment to cultural heritage, biodiversity, and environmental stewardship.

Recommendation: *Develop and adopt protection and enhancement guidelines for Heritage Trees within the County. Consider formal recognition of Heritage Trees through Ontario Urban Forest Council's Heritage Tree Program.*

Independent Verification of Sustainable Forestry Practices

Forest certification and recognition programs are voluntary systems that municipalities can apply for, which demonstrate strong community forest management practices and build **public trust**.

Forest certification programs (such as the Sustainable Forestry Initiative, Forest Stewardship Council, and Canadian Standards Association) require robust environmental audits and oversight, and verify whether forest management practices meet established environmental, economic, and social standards. More than 24 million hectares of Ontario's publicly owned forests are certified under one of these programs.

Benefits of **forest certification** for the County include demonstrated leadership in sustainability and alignment with the Climate Action Plan, improved community trust, engagement, and tree equity, strengthened eligibility for certain grant programs, supports climate resilience goals by requiring adaptive forest management best practices, and provides a framework for continued improvement and transparency. Certification provides a third-party verification demonstrating that the forest is being managed sustainably and responsibly.

Recognition programs (such as *Tree Cities of the World*) are **prestigious and their models are governance-based recognition** for municipalities that meet community forestry best practices, but do not involve third-party audits. This option could build public trust and engagement while serving as a stepping stone towards a formal certification.

The key certification and recognition programs adopted in Ontario and applicable to the County are summarized below.



Table 4. Forest certification and recognition program comparison.

Program	Summary
Forest Certification	
FSC (Forest Stewardship Council)	Emphasizes environmental and social values. Includes strong requirements for Indigenous rights, worker conditions, and conservation. Relevant standard for Brant County is the FSC® Forest Stewardship Standard for Canada for Small-Scale, Low Intensity and Community Forests. Group certification option is available through the Eastern Ontario Model Forest/Ontario Woodlot Association.
SFI (Sustainable Forestry Initiative)	Popular in North America. Includes biodiversity, water quality, aesthetics, public involvement, and fibre sourcing from legal and responsible sources. Relevant SFI standard for Brant County is: Sustainable Forestry Initiative (SFI) Small-Scale Forest Management Module for Indigenous Peoples and Families. Group certification option is available through the Eastern Ontario Model Forest/Ontario Woodlot Association.
Recognition Program	
Tree Cities of the World	International recognition program that acknowledges municipalities for meeting five standards of community forestry excellence.

Recommendation: Explore opportunities and benefits of entering a forest certification or recognition program. Select a program that aligns best with the County's mandates and long-term goals.

3.4.2. Where to Plant

The practices outlined below are aligned with the County's commitment to **climate action, community health, and innovation**. While not all approaches will suit every site or be fiscally feasible, incorporating them selectively provides opportunities to:

- Increase urban biodiversity;
- Engage residents in hands-on sustainability;
- Reframe green space as active infrastructure; and
- Strengthen partnerships with schools, nonprofits, and Indigenous knowledge holders.

Plantable Areas Assessment

A plantable areas assessment could assist the County in prioritizing tree planting areas. This assessment is typically undertaken using a GIS criteria-based assessment

supplemented with field verification. Criteria that could be used to determine priority planting areas include:

- **Ownership and accessibility:** assess land ownership, accessibility, and potential for future development. Prioritize planting areas in the public realm (or private but accessible) that are not targeted for development, such as parkland and boulevards.
- **Soil volume:** assess requirements for intended tree species and availability of appropriate soil volumes. Prioritize areas with adequate soil volume to accommodate the required number and species of trees.
- **Offsets from built form:** develop standard offset distances from built structures/roads. Plant outside of offsets to avoid conflicts with infrastructure.
- **Connectivity:** assess landscape connectivity within the County. For example, Linkage Mapper tools which are powered by Circuitscape² are suitable GIS tools that could be used for this assessment. Prioritize areas that could enhance or improve linkage and connectivity between natural heritage features.
- **Riparian areas:** identify riparian areas that lack tree canopy. Prioritize areas that could enhance or improve riparian and waterway health by increasing canopy cover.
- **Buffers:** identify existing natural heritage features that could benefit from size expansion, canopy gap closure, or additional buffer capacity (i.e. have minimal edge, are located close to development, have gaps in canopy that could increase patch size if planted). Prioritize areas that could expand or enhance existing woodland, wetland, and shorelines.
- **Tree Equity:** Use digital data (e.g., satellite imagery, GIS, LiDAR) to map gaps in canopy cover, heat exposure, and social vulnerability. Calculate a Tree Equity Score at the neighbourhood or census tract level to identify priority zones for planting and investment (see section below: Tree Equity).

Recommendation: *A plantable areas assessment should be undertaken to assist the County in prioritizing large-scale planting, following completion of the Community Forest inventory and preventative maintenance program.*

²Linkage mapper tools available online at URL: <https://linkagemapper.org/>



Tree Equity

Equitable access to urban tree canopy is a critical factor in achieving long-term community well-being, climate resilience, and environmental justice. The County's Community Forest should be managed not only for overall growth and health, but also for its **distribution**, ensuring that all residents can benefit from the essential services that trees provide, regardless of income, language, age, or neighbourhood.

Research and case studies from other Ontario municipalities demonstrate that disparities in tree cover often mirror patterns of **social vulnerability**, leading to disproportionate exposure to **urban heat islands**, reduced air quality, and limited access to nature. Embedding tree equity into the County's community forest strategy ensures a just and sustainable approach that aligns with **public health, climate adaptation**, and **land-use goals**.

To support this objective, a tree equity analysis should be undertaken once a comprehensive tree inventory is completed. The tree equity analysis should examine how tree cover is distributed across Wards and Settlement Areas in relation to population characteristics and community vulnerability. At present, limitations in available spatial datasets preclude the ability to generate a reliable, comparable estimate of tree canopy cover at these finer geographic scales. Addressing these data gaps through improved canopy mapping, standardized methodologies, and the integration of socio-demographic indicators will be essential to meaningfully evaluate tree equity over time and to guide future investment toward communities that are currently underserved by the urban forest.

Recommendation: *To ensure that all residents benefit equally from the community forest, the County should prioritize tree planting in Settlement Areas with low (<10%) canopy coverage, and consider the following practices:*

1. *Conduct Tree Equity Assessments once a comprehensive tree canopy inventory is completed.*
2. *Targeted Tree Planting on Public and Private Lands*
 - *Prioritize low canopy cover, high-need neighbourhoods for municipal tree planting (boulevards, parks, schools).*
 - *Provide subsidized trees for private property planting, especially where yard space exists but capacity is limited.*
 - *Partner with local non-profits and/or community groups to administer tree distribution and stewardship support (e.g., Reep Green Solutions model).*
3. *Engage the Community*



- *Work with residents and local groups to build trust, raise awareness, and ensure accessibility.*
- *Provide tools and training for residents to maintain new trees on their own properties or within their communities.*

4. *Integrate Equity into Urban Planning and Development*

- *Continue to apply minimum canopy cover targets for development applications (i.e. maintain the County's current 30% future canopy coverage requirement for all industrial/commercial lands).*

*Using the plantable areas assessment combined with equity data, establish a **Tree Planting Strategy** with an action plan to prioritize planting initiatives based on greatest need combined with planting partnership and funding opportunities.*

Appropriate Planting Site Assessment

To promote long-term tree health and resiliency, the County should ensure newly planted trees are matched with suitable site conditions to improve the **health, diversity, and long-term success** of community forest assets. This approach helps to improve biodiversity, ensure large shade trees are planted where they can grow best, and reduce tree damage from sidewalks or overhead wires.

Recommendation: *Ensure the Forestry and Horticulture Division is responsible for determining which trees are planted where to ensure long-term tree health and resiliency.*

3.4.3. What to Plant

When considering what species to plant on the landscape, a variety of factors need to be taken into consideration. Input from public engagement indicates that planting species native to Ontario, including rare or less common species suitable for urban areas, is a priority.

Some additional priorities for planting may include:

- Prioritize tree planting **equitably** for climate mitigation and community resilience
- Plant more **robust** trees to meet community forest canopy cover targets
- Plant a **variety of genera and species** to improve pest and climate change resiliency

Additional considerations include planning for species availability in the nursery industry, and the ability of local nurseries to support the demand for native and climate-adapted species.



Locally Native Species

While almost any tree will offer benefits like shade, stormwater management, and air and water purification, locally native species have the added social benefit of place-making, helping to define and distinguish geographic areas on the landscape. The planting of native species in urban areas is also important for biodiversity improvement by providing suitable habitat and support for local wildlife. Native trees support native pollinators and insects, which feed local birds and other wildlife.

Guidance in the County's Official Plan for new plantings states that:

*New trees and vegetation consist of **non-invasive native species**. A mixture of non-invasive native trees, plants, ground covers, savannahs and tallgrass prairies, and seed mixes may be used to achieve the policies of this Plan.*

Appendix A contains a list of suggested climate-adaptive species for planting in the County, including locally native trees and shrubs compiled from a variety of resources including local and nearby municipal street tree guides.

The County should focus on planting 'true' native species where possible. A selection of 'nativar' species (native-cultivars) has also been included as these are often seen as more suitable for use in urban areas as street trees, may have cultivated features desirable for aesthetic or practical reasons, or may be more easily available for purchase in the current nursery market. Nativars are preferred over non-native species, especially those that are invasive species.

Assisted Migration

With accelerating change in climatic conditions, the Community Forest of today may not be optimal to survive under predicted climate change scenarios. This challenge can be addressed in part by utilizing climate analogues, which are identified by running predicted climate conditions under a climate change scenario over a given time period (2041-2070 or 2071-2100). Additional information on this approach can be found on the Government of Canada webpage on climate scenario modelling³.

Based on the climate indices chosen (last Spring frost, mean temperature and total precipitation), a model developed at climatedata.ca identifies **Columbus, Ohio's** present-day climate is a good analogue of the **future climate for Toronto and region**

³ <https://climate-scenarios.canada.ca/?page=scen-rcp>



from 2041 to 2070, under an emissions scenario with moderate greenhouse gas emissions.

This means that in addition to prioritizing native species from local native populations, assisted migration should be integrated where possible and as species/sources become available within the supply chain. This can be done in a variety of ways, including using the EPA's Level III Ecoregional framework⁴:

- a. **Assisted Population Migration (Low risk)** - Sourcing of locally native species from populations further south within the same Level III Ecoregion (e.g. Red Oak from Ohio) to aid in the migration of genetics suited for warmer climates,
- b. **Assisted Range Expansion (Intermediate risk)** - Selection of non-native, non-invasive species from Level III Ecoregions adjacent to their current range to mimic natural range expansion, and,
- c. **Long-distance Migration (Higher risk)** - Human-assisted migration of non-native species that are native to non-adjacent Level III Ecoregions areas much further south (e.g. Southern USA), non-invasive, and will be well-adapted to thrive in future climate conditions locally.

Following the Ecoregions of North America framework, The County of Brant is located in Level III Ecoregion 8.1.2 which is identified as Lake Erie Lowlands in the Ecoregional framework⁵; this broadly corresponds with Ecoregion 7E (Lake Erie-Lake Ontario Ecoregion) following the Province of Ontario Ecoregion framework⁶.

Appendix A identifies species suitable for Assisted Population Migration and Assisted Range Expansion opportunities outlined above. Columns indicate which species are native both locally and to Ohio forests, which are suitable for population migration of genetics (option a), as well as non-native species (in Ontario) that are native to slightly more southern Ohio and have been planted on the landscape in the past or are available in the local nursery trade, and do not show invasive qualities (option b).

⁴ <https://www.epa.gov/eco-research/ecoregions-north-america>

⁵ <https://www.epa.gov/eco-research/ecoregions-north-america>

⁶ <https://files.ontario.ca/mnrf-ecosystemspart1-accessible-july2018-en-2020-01-16.pdf>



Although potential suitable species for assisted range expansion have been provided, species suitability and risk for potential invasive nature should be investigated and considered prior to planting, as updated research becomes available.

Species Diversity

In addition to the considerations above for species selection, the **10-20-30 rule** should be followed when determining which species to plant in the County:

- No more than **10% of any one tree species**
- No more than **20% of any genus**
- No more than **30% of any family**

This approach is broadly accepted by arboriculture professionals and was developed to safeguard community forests from pest and disease outbreaks (e.g., Dutch Elm Disease, Emerald Ash Borer), encourage genetic and structural diversity in tree-planting plans, support long-term resilience and ecosystem service delivery, and provide clarity and monitoring capability in tree species composition.

Recommendation: *Native, nativar, and climate-adaptive species should be prioritized for new plantings within the County. Non-continental species listed on the County of Brant Approved Trees list (Technical Tree Guidelines Appendix 1) should be planted only in cases where site and growing conditions limit species diversity of new plantings.*

Following the tree canopy inventory, establish whether the County's Community Forest currently meets the 10-20-30 rule and develop targets for improvement. Ensure the 10-20-30 rule is met for all new plantings in the County.

3.4.4. How to Plant

Street Trees

As critical components of community forests, street trees provide shade, improve air quality, aesthetically enhance the streetscape, and reduce urban heat islands and harsh winds. Given these benefits, it's worth addressing several inherent challenges in successfully planting and maintaining street trees. Typically, harsh urban street conditions – salt spray, soil compaction and limited soil volume – require special considerations for species selection, siting, soil mediums and engineering a space for trees to grow.

Fortunately, there are tree species that are hardy to street conditions, given the right care. To increase the health and survival of these species, there are several ways to address soil compaction, soil volume, and water availability requirements described in the County's Technical Tree Guidelines. Engineering solutions to improve soil and water conditions for trees along streets include soil cells, structural soil, permeable pavement, tree grates and soil trenches (Appendix C).



Proper installation of street trees (i.e. ensuring adequate space and soil volume for root growth, structural support, and protection of the root ball) is critical for long-term survival. The County's Technical Tree Guidelines contain detailed instructions and specifications for street tree installations.

To further engage the community and offset costs of street tree planting and maintenance, the County may want to initiate a program like Ottawa [Trees in Trust](#) program, where the City takes on the tree planting and homeowners agree to care for the tree (watering) for the first three years after planting. Participation in the program is initiated by homeowner request, who commit to caring for the tree once planted. Similarly, Haldimand County has an online [Request a Tree](#) program where residents can apply for a street tree.

Recommendation: *To maximize the environmental and community benefits of street trees while addressing the challenges of urban growing conditions, the County should continue to integrate best practices in urban tree installation, ensuring the County's Technical Tree Guidelines are followed. The County may wish to explore stewardship-based planting programs to offset planting costs. This approach will support the long-term health and resilience of the County's street tree canopy while encouraging shared responsibility with residents and aligning with urban design goals.*

Restoration and Naturalized Areas

Clustered and scattered plantings are two effective methods of restoration plantings for sites where naturalization is the primary goal (i.e. edge/buffer plantings, riparian areas).

Clustered planting is a method of restoration planting where smaller potted or bare root trees and shrubs are planted in groups (clusters) within a site based growth factors such as moisture regime. Cluster size should be identified based on the site and its restoration goals (typically 5-30m²). Trees with similar growth rates are planted in the same cluster, with late successional species surrounded by early successional species to encourage long-term survival. Nodes should be spaced no more than 6 m apart with trees spaced 1.2 - 1.8 m apart to promote early crown closure, vertical growth, and shading of competing ground cover (Figure 5; Conservation Halton, 2024).

Scattered planting differs from clustered planting in that trees and shrubs are planted more randomly across a site with a diversity of ages planted, and trees and shrubs spaced further apart (Figure 5; Conservation Halton, 2024)



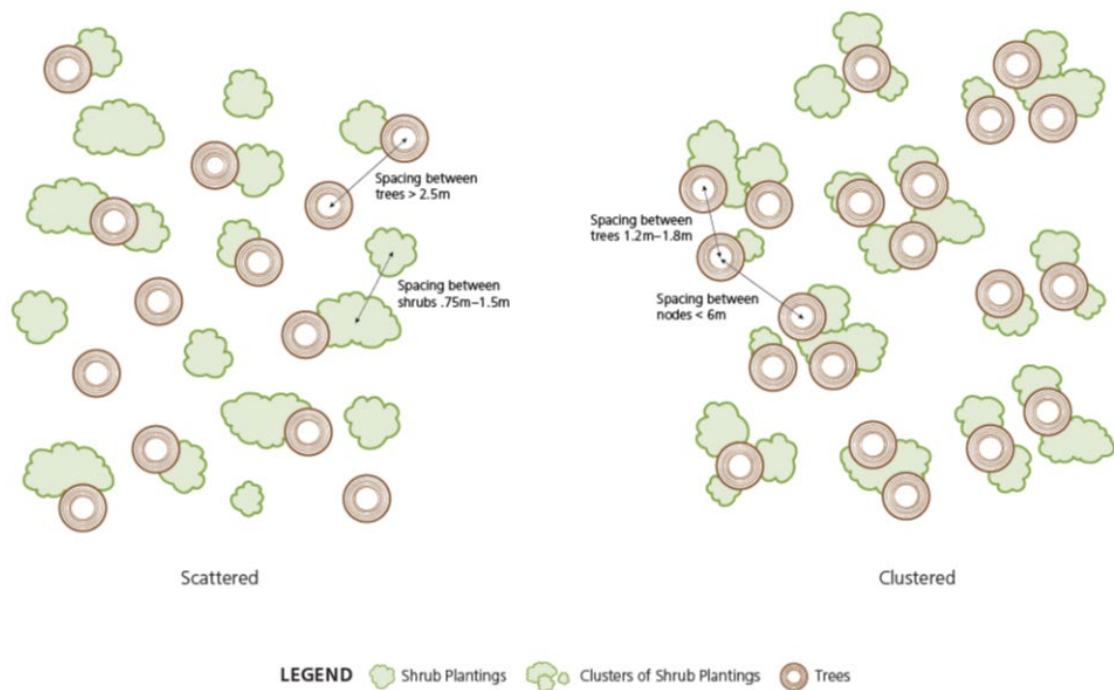


Figure 5. Clustered vs. scattered planting diagram (Conservation Halton, 2024).

In both planting scenarios, a native groundcover seed mix should be planted around and between new woody plantings, and the area should be mulched to prevent weed establishment.

Recommendation: *Where feasible, tree planting in restoration sites and within or adjacent to natural areas should use cluster or scattered planting methods to improve planting success and long-term resilience.*

Hedgerows and Windbreaks

Hedgerows and windbreaks can help to reduce wind damage to crops while preventing soil erosion and encouraging biodiversity in agricultural settings. These types of plantings could be **coordinated through partnerships with landowners and farmers** through funding initiatives such as the Grand River Cover Crop Program, Rural Water Quality Program, or Brant Grow Green Program administered by GRCA. Currently within the County of Brant, the Grand River Conservation Authority offers funding opportunities for rural landowners to plant trees (including windbreaks and hedgerows) to provide landowners access to affordable and professional tree planting.

General guidelines for hedgerows and windbreaks are available online from the Government of Ontario (see ["Strategies for establishing and using windbreaks successfully"](#)).

General guidelines for hedgerow and windbreak **maintenance** are provided below (Ontario, 2024):

- Conduct routine maintenance, thinning and inspections.
- Prune and thin appropriately: Remove low-hanging branches, thin limbs, and remove stems of mature trees to avoid damage to equipment and provide potential for additional income through sale of lumber.
- Avoid double leaders (two shoots that grow from the stem/branch at the top of the tree) to promote better growth and effectiveness.
- Use proper protection from pests and deer to promote effective windbreaks.
- Regularly inspect for and remove weeds such as wild grapevines and invasive buckthorn that can kill windbreak trees.

Recommendation: *The County should identify priority areas for windbreak and hedgerow plantings, and engage with farmers and landowners to implement and monitor tree plantings through various funding opportunities, such as the Grand River Cover Crop Program, Rural Water Quality Program, or Brant Grow Green Program administered by GRCA.*

3.4.5. Maintenance + Management

Routine Pruning

Routine pruning is a foundational component of healthy, safe, and sustainable community forest management. It plays a critical role in **reducing tree risk**, extending tree lifespan, and managing growth in urban settings. The County of Brant is transitioning from a reactive maintenance approach to **a structured, preventative model** which poses an important evolution in support of long-term canopy health and fiscal efficiency. Routine pruning is important for several reasons, including:

- **Maintaining Tree Health:** Pruning removes dead, diseased, or structurally weak limbs, allowing trees to heal and thrive.
- **Risk Reduction:** Regular inspections and maintenance reduce the likelihood of falling limbs and related liabilities.
- **Infrastructure Protection:** Proper clearance from buildings, sidewalks, signs, and utilities minimize conflict and future costs.
- **Canopy Longevity:** Early and consistent structural pruning, especially of young trees, sets trees up for long-term health and reduces future corrective work.
- **Aesthetic Value:** Well-maintained trees contribute to community pride and neighbourhood character.



In 2023, the County undertook a comprehensive assessment of trees in parks, cemeteries, and around County facilities to inform the development of tree maintenance cycles. This inventory effort provided critical data on maintenance needs helping to lay the groundwork for a cyclical, risk-informed approach to pruning.

Recognizing the need for internal coordination, the Forestry and Roads divisions have initiated collaborative planning for pruning cycles along road corridors, and a pilot block pruning program began in Paris in early 2024. These efforts mark the County's first steps toward a more consistent and proactive tree care program.

The County of Brant is committed to advancing a **county-wide preventative maintenance program**, with the goal of full implementation by **2028**. Benefits of preventative maintenance include improved tree health and structure, fewer emergency removals, lower long-term maintenance costs, enhanced public safety and service reliability, and stronger alignment with climate resilience goals. This program should be implemented for **public trees** in accordance with requirements outlined in the Tree Technical Guidelines, as summarized below:

1. Block Pruning and Inspection Cycles

- County owned trees should be proactively pruned and / or inspected in the **County's settlement areas and rural rights-of-way**. This preventative maintenance will include the pruning of boulevard trees, trees within the municipal right-of-way, park trees, and trees that exist on other municipal properties. Trees requiring pruning should be prioritized and scheduled accordingly, and in accordance with the County's Technical Tree Guidelines.
- Block pruning should occur **every 7 years** within settlement areas. Scheduling block pruning on a multi-year rotation will improve efficiency, reduce long-term costs, and minimize reactive work.

2. Structural Pruning Program

- **Newly planted trees** (0-3 years after planting) should be structurally pruned to help the tree develop one main leader and one trunk. Structural pruning of newly planted trees should occur within 3 years post-planting or when recently out of warranty to avoid issues with codominant growth. If only light pruning is needed, pruning at planting or soon after may be appropriate depending on species and time of year.
- **Young trees** (4-17 years after planting) should be pruned 7-10 years post-planting and 14-17 years post-planting.



- **Mature trees** (>17 years after planting) should be pruned every 5-7 years on a rotational basis, and inspected for defects using a Level 2 TRAQ (Tree Risk Assessment Qualification) assessment.
- **Veteran trees** (trees >80cm DBH and/or having cultural or historical significance) should be pruned and/or inspected every 5-7 years on a rotational basis, limited to work that is absolutely necessary.
- Continue to maintain the online Tree Maintenance Request form where residents can report damaged, dying, hazardous or diseased trees.

Recommendation: *Commence implementation of a preventative maintenance program for public trees in settlement areas by 2028, guided by the Technical Tree Guidelines, which includes:*

- *block pruning every 7 years;*
- *structural pruning of newly planted trees within 3 years post-planting;*
- *structural pruning of young trees 7-10 and 14-17 years post-planting;*
- *structural pruning and TRAQ assessment of mature trees every 5-7 years, and*
- *structural pruning and/or inspection of veteran trees every 5-7 years.*

The County's tree inventory should be updated as tree pruning activities occur. All tree maintenance activities and decisions should be coordinated through the Forestry and Horticulture Division, working collaboratively with Roads and other departments to ensure consistency with arboricultural best practices, risk management, and long-term canopy objectives. Maintain the current funding allocated to the Hazard Tree Removal Program and, through annual review, progressively align its use with the County's preventative maintenance program.. This transition will ensure no loss of critical forestry funding and will support the County's goal to commence a fully operational block pruning and proactive tree care program across all wards by 2028.

Integrated Pest Management

A variety of pests and diseases may target trees planted on the landscape, including but not limited to:

- Hemlock woolly adelgid
- Emerald ash borer (EAB)
- Spotted lanternfly
- Oak wilt
- Beech leaf disease
- Beech bark disease
- LDD moth (formerly Gypsy moth)



The County currently encourages reporting of pests and disease through their [website](#) or by contacting the Forestry and Horticulture division directly.

Risk of rapidly spreading pests and disease can be somewhat mitigated through proper diversity in planting species, such as through the 10-20-30 method (see section 363). Having an integrated pest management (IPM) plan can help appropriately respond to outbreaks of pests and diseases in urban areas.

IPM plans help to address issues related to pests and diseases through a decision-making process that utilizes all resources available to a management team. Depending on the pest/disease, severity, location, resources available, and priority for treatment, different methods may be used such as biological, physical, behavioral, and chemical controls. Depending on the goals of the County, the aim of the IPM may be to limit or reduce pesticide use in urban areas. Some municipalities, like City of Toronto, will not remove a tree or use pesticides for pests that only cause cosmetic damage, and reserve use of pesticides for threats that cause serious harm to tree health.

Recommendation: *The County should continue to monitor and track pest and disease pressures and apply appropriate management strategies through the development of an Integrated Pest Management (IPM) plan. The County should also continue to provide education and support to private landowners to help them coordinate and implement IPM plans.*

Invasive Species Management

Invasive species management is an important part of maintaining high-quality community forests. The County currently encourages residents to use the EDDMapS reporting system for invasive plants, and the more direct “Report a Problem” form for dangerous species like Giant Hogweed. The County’s Invasive Insects and Pest webpage also directs residents to the Invasive Species Centre website for more information.

Participants in the engagement session noted the importance of ongoing invasive species management, including priority species like European Common Reed (*Phragmites australis*) and Japanese Knotweed (*Fallopia japonica*).

Invasive species management plans (ISMPs) aim to treat priority species while adapting over time depending on the results of treatment and follow-up monitoring; typically there are three levels of priority:

1. Monitor and protect high-quality areas from invasive species,
2. Remove and treat small populations of invasive species to avoid establishment and spread, and,
3. Provide ongoing treatment of larger populations to allow for recovery of native species.

The goal of invasive species management is often not total removal, but an overall reduction of invasive species in natural areas. Paired with restoration and native species planting programs, the quality of natural areas can be improved over time. Early detection (through education and engagement with residents and land managers) and rapid response can prevent the spread and establishment of non-native species, saving costs and resources.

Recommendation: *The County should establish an adaptive invasive species management plan focused on:*

- **Early detection and rapid response (EDRR)** to emerging threats;
- **Ongoing monitoring and prioritization** of target species within the Community Forest and adjacent lands;
- **Use of best management practices** tailored to species, site conditions, and ecological impact;
- **Community education and engagement** to build awareness, encourage early reporting, and promote volunteer involvement in control efforts.

The Cost of Not Maintaining Trees

Trees are long-term community assets that provide shade, improve air quality, reduce stormwater runoff, and enhance property values. However, these benefits are only realized if trees are maintained proactively. Research from the International Society of Arboriculture (ISA) highlights that the costs of not maintaining community forests are **substantially higher over time** than the costs of preventative care.

Reactive vs. Preventative Costs

- Deferred maintenance increases costs: Deferring basic activities such as pruning, watering, and pest monitoring results in higher removal costs, greater liability exposure, and increased infrastructure conflicts. One study found that deferring pruning cycles by four years led to a 1.5–1.7 times cost increase compared to proactive pruning (Browning and Wiant, 1997).
- Tree loss is more expensive than tree care: Replacing dead or failed trees due to lack of care is consistently more expensive than maintaining them, especially when factoring in lost ecological services such as stormwater retention and carbon storage.
- Pest and disease control is cheaper when proactive: Historical and contemporary examples, from Dutch Elm Disease to Emerald Ash Borer, show that early intervention and treatment returns higher net benefits than removal-and-replacement approaches after widespread mortality.

Economic and Social Implications

- Mature trees provide exponentially greater net benefits than young or newly planted trees. Failing to maintain them prematurely reduces canopy cover and forces municipalities to incur both replanting costs and decades of lost ecosystem services.
- Crisis-driven approaches shift municipal budgets toward emergency removals, legal claims, and accelerated replacement, reducing resources available for proactive community forest growth.

Strategic Importance for the County

As the County transitions its Hazard Tree Removal Program into a Preventative Maintenance Program by 2028, it is critical to retain existing funding levels. Without proactive investment, the County risks higher long-term expenditures, reduced canopy benefits, and increased liability. Preventative maintenance ensures trees live longer, provide greater services, and reduce overall life-cycle costs, as shown in Figure 6 below.

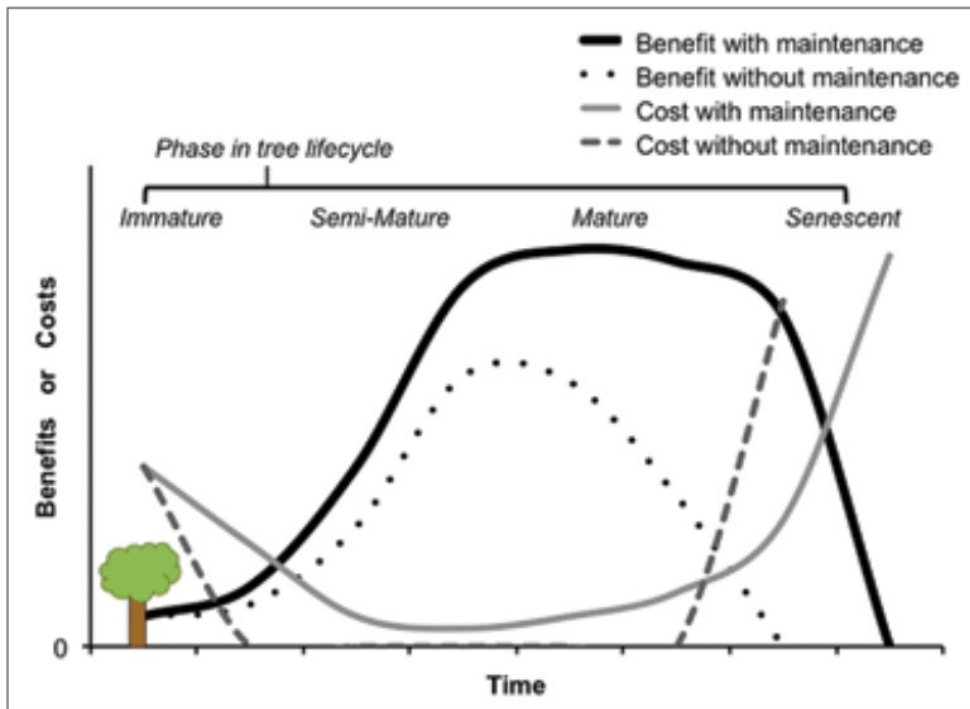


Figure 6. Theoretical costs and benefit profiles over the lifetime of an individual tree. Benefits are maximized during the mature phase of a tree and decline rapidly through senescence, while costs show an inverse pattern (Vogt et al. 2015).

3.4.6. Enhancing the Community Forest

To ensure the long-term health, resilience, and multifunctionality of the County's community forests, it is essential to look beyond traditional forestry approaches and explore **innovative and emerging practices**. These approaches can enhance ecological value, increase community engagement, and support climate adaptation—particularly in urban and rural contexts.

As pressures from development, climate change, and biodiversity loss increase, these practices offer new opportunities to **diversify the forest landscape**, improve **soil and tree health**, and create spaces that are both **productive and regenerative**.

Mini Forests (Miyawaki Method)

Mini Forests are dense, fast-growing, biodiverse plantings modeled after natural forest regeneration. Using native species planted closely together (3-5 plants per meter square), these forests can grow up to 10 times faster, support greater biodiversity, and sequester more carbon than conventional plantings. They are ideal for underutilized urban parcels, schoolyards, or parks, and can be implemented with strong community participation, increasing both engagement and ecological function. Network of Nature and Green Communities Canada have a variety of resources available, such as the [Mini Forest Curriculum](#) and the free [Mini Forest Training](#) course.

Recommendation: *Pilot a Mini Forest project on a public site in partnership with local schools or community groups.*

Food Forests and Edible Landscaping

Food forests integrate fruit- and nut-bearing trees, shrubs, herbs, and perennials into a self-sustaining ecosystem. They provide local food access, especially in underserved areas, and support pollinators and biodiversity. Beyond food production, these sites become living examples of agroforestry and urban resilience, encouraging stewardship and ecological education.

Recommendation: *Pilot a food forest in a suitable location (e.g., in a community garden or park) in partnership with local food security organizations such as The Brant Food System Coalition (BFSC) and Equal Ground Community Gardens.*

Regenerative Agriculture and Silvopasture

In the County's rural areas, integrating regenerative land practices, such as silvopasture (trees with grazing animals) or alley cropping, can improve soil health, increase water retention, and diversify land productivity. These systems merge tree cover with agricultural use, supporting climate resilience while contributing to the County's broader natural heritage and economic goals.

Recommendation: Explore opportunities to integrate regenerative practices into municipal or demonstration farms, and support landowners through education or incentive programs.

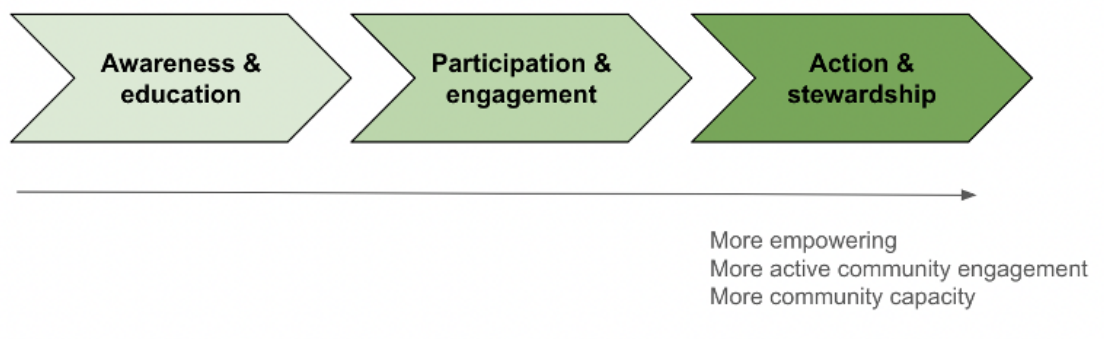
Soil Amendments: Biochar and Composting

Healthy soils are foundational to a thriving forest. Biochar—charcoal produced from organic waste—can improve soil structure, water retention, and microbial activity while also storing carbon long-term. Alongside compost-based amendments, it offers a nature-based solution to support urban trees in compacted or nutrient-poor soils, particularly in boulevards and intensively used parks. Biochar can be sourced from a number of suppliers such as Black Swallow Soil (Brantford) or Haliburton Forest Biochar, and should be applied using [best management practices](#).

Recommendation: Incorporate soil amendments into future planting trials or restoration sites and assess outcomes on growth and survival.

3.4.7. Community Education, Engagement and Stewardship

Effective community engagement and stewardship is an iterative and continuous journey. The following three pillars and associated recommendations are designed to work in sequence, each reinforcing and building upon the last, to deepen local understanding, strengthen values-based participation, and ultimately grow a culture of stewardship.



Recommendations:

Awareness & Education: Create a multi-pronged, strategic approach to enhance public education on tree planting, restoration, and other environmental initiatives taking place.

- Leverage multiple channels for outreach - social media, community centres, local schools, libraries, and events - to share information in plain language (e.g. story boards) and reflect community priorities.

- Create a centralized, easy-to-navigate online portal or mobile-accessible hub with maps, project updates, funding opportunities, and stewardship opportunities to build transparency and trust (e.g. [Haldimand County's Tree & Forest Conservation webpage](#)).
- Continue to install educational signage in parks and along trails to highlight nearby projects, ecological benefits, and ways to get involved
- Provide hands-on learning experiences such as workshops, demonstration sites, and school programs, in addition to story-based communications which can foster emotional connections.
- Integrate education with citizen science (e.g. species ID, invasive species monitoring) to encourage learning through participation.
- Provide resources through the County of Brant Library Gear and Gadget collection.

Participation & Engagement: Continue to develop community engagement initiatives to ensure that all community values are identified and lived experiences are heard.

- Use tactical, place-based approaches including use of interactive QR codes placed in key locations, such as urban parks, green corridors, or key restoration sites, to prompt brief, mobile-friendly pop-up surveys. These surveys can gather context-specific feedback on residents' experiences, priorities, and ideas for improvement.
- Use story maps, participatory GIS tools, and interactive web portals to collect spatially-explicit values data (e.g. where people walk, feel safe, or observe wildlife).
- Install temporary or mobile kiosks at community events to facilitate deeper in-person engagement.
- For more targeted input, workshops and listening sessions should be held with youth, newcomers, and Indigenous communities, to surface perspectives not always captured in broader surveys. Values elicitation should be iterative to ensure feedback loops are closed and participants see their input reflected in decisions.

Action & Stewardship: Explore opportunities to implement lower-cost, high-impact participatory tools that invite ongoing involvement to translate awareness and engagement into stewardship.

- Explore citizen science initiatives or fixed-post photography projects which encourage residents to take repeat photos from the same vantage point over time, visually documenting seasonal and ecological changes.



- *Continue to coordinate adopt-a-tree programs, community planting days, or youth eco-leadership initiatives in partnership with schools. Incentives such as stewardship badges, recognition boards, or digital leaderboards can gamify participation.*
- *Integrate these initiatives into existing data platforms where possible (e.g. iNaturalist, community Facebook groups) and support initiatives with accessible training resources.*

Identifying priority locations such as parks and trailheads will ensure visibility and maximize participation.

4. IMPLEMENTATION PLAN

4.1. Goals + Actions

4.1.1. Preventative Maintenance Program

A key priority moving forward is the launch of the preventative maintenance program. Preventative maintenance has been shown to lower long-term costs by reducing reactive service requests, while also improving tree health and resilience to storms, pests, and diseases. The recent addition of the Arborist position within the Forestry team will provide dedicated technical capacity to support this program. The funds currently allocated in the roads operations budget for managing hazard roadside trees and Emerald Ash Borer impacts should be re-designated within the existing budget framework to also support the preventative maintenance program.

One of the County's strengths is that funding for forestry work is distributed across several departments, making it more operationally efficient. This decentralized approach should be maintained as the following recommendations are implemented. Beyond County funding, it will also be important to pursue new partnerships and external funding opportunities to share resources and further reduce costs.

4.1.2. Goals and Associated Plans of Action

Actions listed below are coded by the goal they align with and their implementation timelines. Short term implies that actions will be implemented in 0-2 years, medium is 3-5 years, and long-term is 6-10 years. The resources required column contains estimates for the proposed recommendation that align with the procurement process as defined in the Purchasing Policy for the County.

This list is not intended to be an exclusive list of actions to pursue during the strategy's lifetime; additional actions may be pursued by the County budgets and staff capacity permits.

Timeline	Strategy	Recommendation	Action item	Resources required
Goal: Long-Term Resilience and Planning				
Short-Term	Capacity Building	Further develop the compensation policy in the County of Brant Technical Tree Guidelines to ensure that that County projects follow the same guidelines as external projects, promoting consistency, transparency, and fairness. Develop guidelines for the Canopy Reserve Fund that tracks the compensation funding to ensure that it is earmarked for tree planting initiatives only.	Re-write the compensation policy in the County of Brant Technical Tree Guidelines to apply to internal departments within the County. Develop guidelines for the Canopy Reserve Fund that tracks the compensation funding to ensure that it is earmarked for tree planting initiatives only.	within existing resources
Medium Term	Capacity Building	That the County expand the current forestry team comprised of 1 Forestry Supervisor and 1 arborist in concert with growth of the municipality.	Investigate the cost effectiveness of additional in-house Forestry staff to service growth.	\$50K-\$100K; 1 FTE
Medium-Term	Capacity Building	Stewardship & Volunteers - Engage public in watering/mulching/ invasive species removal	Develop program to engage public in watering/mulching/ invasive species removal.	within existing resources
		Education & Outreach -Install signage, create newsletters, attend public events related to the Community Forest	Design signage, create a newsletter template and research content. Review what public events staff should attend.	<\$10K, or within existing resources
		Monitor Success Metrics for Tree Planting and Maintenance.	Develop and implement an online tree inspection system. Track tree survival rates, removals, tree health.	<\$10K, or within existing resources
Medium-Term	Maintenance & Management – Invasive Species Management Plan	Utilize early detection and rapid response (EDRR) to emerging threats, ongoing monitoring and prioritization of target species within the Community Forest and adjacent lands Use of best management practices to build awareness, encourage early reporting, and promote volunteer involvement in control efforts.	Re-write actions plans and develop an adaptive invasive species management program.	within existing resources

Timeline	Strategy	Recommendation	Action item	Resources required
Medium to Long-Term	Fiscal Responsibility and Program Sustainability	Expand contributions to existing partnerships and funding programs that are working well (i.e. Brant Grow Green) Explore new funding opportunities, cost-sharing, and partnership opportunities to develop a sustainable funding and delivery model that balances community demand for tree planting and maintenance with fiscal realities. Explore a boulevard planting program for residents and businesses. Continue to support programs offered by conservation authorities and other organizations to help property owners improve their natural assets and support climate action.	Continue to expand existing partnership and funding programs while exploring new funding, cost-sharing and partnership opportunities. Pursue funding, cost-sharing, and partnership opportunities to establish a sustainable model for delivering tree planting and maintenance that aligns community demand with available resources. Assess the feasibility of a boulevard planting program for residents and businesses, including guidelines, costs, and implementation options. Maintain and enhance support for conservation authority and partner programs that help property owners improve natural assets and advance climate action.	<\$10K, or within existing resources
Goal: Preserve Trees on Public and Private Lands				
Short-Term	Street Tree Inventory	Complete a full inventory of public street trees in settlement areas.	Complete a full inventory of public trees in settlement areas first, then rural roads (i.e. using GIS modeling supplemented with targeted field verification) with a plan for regular updates every 7-10 years, and more frequently for trees requiring close monitoring (e.g.hazardous, mature, high traffic areas).	\$10K-\$20K, or within existing resources
		Maintain an up-to-date inventory of new plantings, removals, pruning and maintenance actions within the GIS system.	Incorporate new plantings, removals and maintenance actions into inventory.	within existing resources
Medium-Term	Heritage Tree Protection & Enhancement	Develop and adopt protection and enhancement guidelines for Heritage Trees within the County and implement a Heritage Tree Program.	Work collaboratively with the Brant Heritage Committee to write protection and enhancement guidelines for Heritage Trees within the County. Prepare a joint report to adopt a Heritage Tree Program. Develop an implementation plan for a Heritage Tree Program.	<\$10K, or within existing resources
Goal: Maintain & Enhance a Healthy, Safe and Functional Community Forest				

Timeline	Strategy	Recommendation	Action item	Resources required
Short-Term	Maintenance & Management – Routine Pruning	Commence implementation of a preventative maintenance program for public trees in settlement areas by 2028, guided by the Technical Tree Guidelines.	Forestry and Horticulture Division to lead the development and commencement of a preventative maintenance program for public trees in settlement areas by 2028, guided by the Technical Tree Guidelines, which includes: 1. Block pruning every 7 years 2. Structural pruning of newly planted trees within 3 years post-planting 3. Structural pruning of young trees 7-10 and 14-17 years post-planting 4. structural pruning and TRAQ assessment of mature trees every 7 years, and 5. Structural pruning and/or inspection of veteran trees every 5-7 years. The County's tree inventory should be updated as tree pruning activities occur.	Maintain existing funding resources by re-designating the Hazard Tree Program funds to Preventative Maintenance Program. Investigate the cost effectiveness of additional in-house Forestry & Horticulture staff to service growth (long-term).
Medium Term	Invest in Equipment and Resources	Invest in equipment (e.g., trucks, chippers, watering units) to improve efficiency and safety.	Continue with cross-department resource sharing. Identify needs, costing, and investment plan for new equipment. Purchase necessary equipment.	Planning: within existing resources Purchase equipment: \$30K-100K
Medium-Term	Enhancing the Community Forest	Prepare a comprehensive Woodland Strategy to guide the long-term conservation, enhancement, and management of its woodland resources.	Develop a County Woodland Strategy by 2028.	\$20-50K
Short-Term	What to Plant	Revise accepted Trees Planting List to include native, nativar, and climate-adaptive species. Assess whether the County's Community Forest currently meets the 10-20-30 rule and establish targets for improvement.	Update Tree Planting List and include in the updated Development and Engineering Design document. Post and circulate the updated Tree Planting List on the County website and attach with Forestry and Horticulture Division comments for development applications. Develop social media posts to promote trees to plant in Brant campaign.	within existing resources

Timeline	Strategy	Recommendation	Action item	Resources required
Short-Term	How to Plant – Street Trees	Continue to require compliance with best practices in urban tree installation, ensuring the County’s Technical Tree Guidelines are followed. Review and revise, as needed, standard drawings that are included in the Technical Tree Guidelines to support urban design goals.	Continue to incorporate the best practices for planting as defined in the Technical Tree Guidelines in all aspects of tree planting operations including contract details with planting agencies. Update the County's Forestry webpage with information on tree planting and funding opportunities for landowners within the County.	within existing resources
Short-Term	How to Plant – Restoration and Naturalized Areas	Use cluster or scattered planting methods to improve planting success and long-term resilience.	Incorporate the cluster or scattered planting approach into current planting guidelines.	\$10-20K
Short-Term	Plantable Areas Assessment	Complete a plantable areas assessment, following completion of the Community Forest inventory.	Map the plantable areas and develop an implementation plan.	<\$10K, or within existing resources
Medium-Term	Tree Equity	To ensure that all residents benefit equally from the community forest, the County should prioritize tree planting in Settlement Areas with low (<10%) canopy coverage,	1. <i>Conduct Tree Equity Assessments</i> 2. <i>Targeted Tree Planting on Public and Private Lands</i> • <i>Prioritize low canopy cover, high-need neighbourhoods for municipal tree planting (boulevards, parks, schools).</i> • <i>Consider providing subsidies for private property planting, especially where yard space exists but capacity is limited.</i> • <i>Partner with local non-profits and/or community groups to administer tree distribution and stewardship support (e.g., Reep Green Solutions model).</i> 3. <i>Engage the Community</i> • <i>Work with residents and local groups to build trust, raise awareness, and ensure accessibility.</i> • <i>Provide tools and training for residents to maintain new trees on their own properties or within their communities.</i> 4. <i>Integrate Equity into Urban Planning and Development</i> • <i>Continue to apply minimum canopy cover targets for development applications (i.e. maintain the County’s</i>	within existing resources

Timeline	Strategy	Recommendation	Action item	Resources required
			<i>current 30% future canopy coverage requirement for all industrial/commercial lands).</i> <i>Using the plantable areas assessment combined with equity data, establish a Tree Planting Strategy with an action plan to prioritize planting initiatives based on greatest need combined with planting partnership and funding opportunities</i>	
Medium-Term	How to Plant – Hedgerows and Windbreaks	Identify priority areas for windbreak and hedgerow plantings.	Engage with farmers and landowners to implement and monitor tree plantings. Publicize tree planting opportunities through various funding sources.	<\$10K, or within existing resources
Medium-Term	Maintenance & Management – integrated pest management	Apply the 10-20-30 method to mitigate against future pests and disease. Develop an Integrated Pest Management plan to monitor and address target pests and disease.	Implement an Integrated Pest Management program. Annual review of existing and emerging forest pests and diseases.	\$20-50K for IPM; within existing resources for annual review of pests and disease risks.
Medium-Term	Appropriate Planting Site	Develop an internal protocol to ensure the Forestry and Horticulture Division is responsible for determining which trees are planted and where on County property.	Implement a communication protocol and update mapping for planned planting sites and update inventory when planting is complete.	<\$10K, or within existing resources
Long-Term	Enhancing the community forest – Soil Amendments: Biochar and Composting	Incorporate soil amendments into future planting trials or restoration sites and assess outcomes on growth and survival.	Incorporate soil amendments into future planting trials or restoration sites and assess outcomes on growth and survival.	\$10K - \$15K
Goal: Strengthen Partnerships and Collaboration				

Timeline	Strategy	Recommendation	Action item	Resources required
Short-Term	Awareness and Education	Develop a strategic approach to public education on tree planting, restoration, and environmental monitoring.	Create a multi-pronged, strategic approach to public education on tree planting, restoration, and environmental monitoring. Create a centralized, easy-to-navigate online portal or mobile-accessible hub with maps, project updates, funding opportunities and stewardship opportunities to build transparency and trust. Install educational signage in parks and along trails can highlight nearby projects, ecological benefits, and ways to get involved.	Existing resources. \$10K - \$20K for signage.
Medium-Term	Enhancing the Community Forest - Mini Forests	Pilot a Mini Forest project on a public site in partnership with local schools or community groups.	Assess which schools can support a Pilot a Mini Forest project. Prepare presentation for School Board superintendents and gain approval to approach schools. Reach out to principals to see if there is interest to implement on school property and coordinate if given the green light.	\$10K - \$20K; consider existing funding opportunities and/or partnerships to support this initiative
Medium-Term	Enhancing the Community Forest - Food forests and Edible Landscaping	Pilot a food forest in a suitable location (e.g., in a community garden or park) in partnership with local food security organizations such as The Brant Food System Coalition (BFSC).	Pilot a food forest by identifying suitable locations such as community gardens or parks and confirming site viability. Engage local food security partners (e.g., BFSC) to establish shared objectives and define roles, then develop a simple planting concept and implementation plan together. If partners agree to proceed, prepare the site, coordinate planting activities, and support installation. Establish stewardship responsibilities with partners and monitor the pilot's success to inform opportunities for future expansion.	\$10K - \$20K; consider existing funding opportunities and/or partnerships to support this initiative
Long-Term	Enhancing the community forest - Regenerative Agriculture and Silvopasture	Explore opportunities to integrate regenerative practices into municipal or demonstration farms, and support landowners through education or incentive programs.	Explore opportunities to integrate regenerative practices into municipal or demonstration farms, and support landowners through education or incentive programs.	< \$10K; or with existing resources



Timeline	Strategy	Recommendation	Action item	Resources required
Long-Term	Participation and engagement	Continue to develop community engagement initiatives to ensure that all community values are identified. Explore the use of tactical, place-based engagement tools, such as QR-code surveys, story maps, participatory GIS, temporary installations, and targeted workshops, to gather spatially relevant community values and ensure feedback is iteratively incorporated into decision-making.	Continual development of community engagement initiatives to ensure that all community values are identified. Evaluate engagement technologies, such as geofenced surveys, augmented reality tools, and AI-assisted participatory mapping, to identify methods that can enhance place-based input. Building on this, install QR codes at key locations like parks, trails, and restoration sites to gather quick, mobile-friendly feedback, and use story maps, participatory GIS tools, and interactive web portals to collect spatially explicit community values. Complement these tools with temporary installations or mobile kiosks at community events to support in-person engagement, and hold targeted workshops with youth, newcomers, and Indigenous communities to capture perspectives often underrepresented in broad surveys. Finally, ensure that engagement is iterative by reporting back to participants and demonstrating how their input informs decisions.	\$10K - \$20K, or consider 0.5 FTE
Long-Term	Independent Verification of Sustainable Forestry Practices	Explore opportunities and benefits of entering a forest certification or recognition program. Select a program that aligns best with the County's mandates and long-term goals.	Review a range of forest certification and recognition programs (e.g., FSC, SFI, Tree Farm, or municipal-focused stewardship programs) to understand their requirements, costs, verification processes, and relevance to municipal forestry. Assess how each program aligns with the County's mandates, values, and long-term goals, such as sustainable harvesting, biodiversity enhancement, climate resilience, and community stewardship. Evaluate operational implications, data needs, and potential benefits, including public trust, external verification, and access to funding or markets. Based on this evaluation, shortlist the most suitable programs and conduct a feasibility and readiness assessment. Finally, select the certification or recognition pathway that provides the strongest alignment and value, and develop an implementation roadmap outlining timelines, resourcing needs, and any required policy or operational updates.	< \$20K - 30K
Goal: Support Recreational Opportunities and Other Initiatives				

Timeline	Strategy	Recommendation	Action item	Resources required
Long-Term	Action and Stewardship	Explore opportunities to implement lower-cost, high-impact participatory tools that invite ongoing involvement in collaboration with Recreation Programs and Services Division	Continual exploration of stewardship opportunities to implement lower-cost, high impact participatory tools that invite ongoing involvement. Develop citizen science initiatives or fixed-post photography from the same vantage point over time, visually documenting seasonal and ecological changes. Develop an adopt-a-tree programs. Continue to implement and/ or expand community planting days. Develop youth eco-leadership initiatives in partnership with schools. Integrate existing data platforms where possible (e.g. iNaturalist, community Facebook groups) and support with accessible training resources.	\$10K - \$50K, or 0.5 FTE



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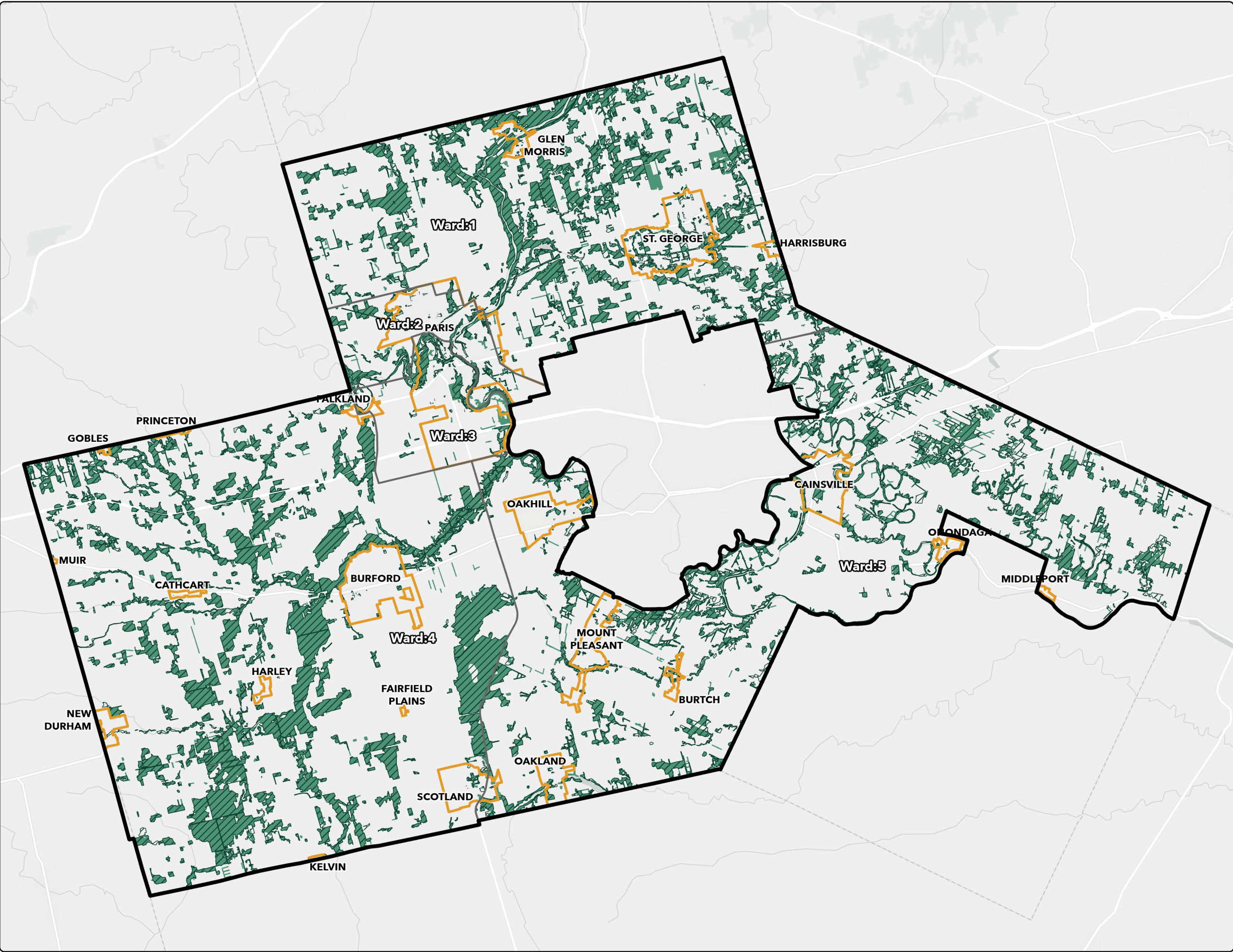
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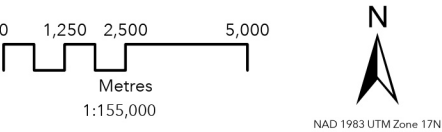
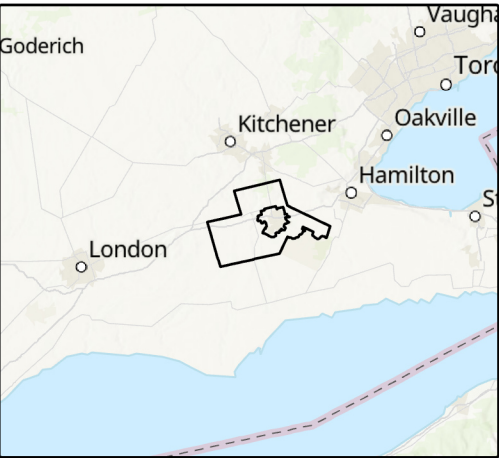


Map 1: Existing Community Forest Cover ¹

Brant County

- County of Brant
- Wards
- Settlement Areas
- County Woodlands
- Wooded Area (MNR)

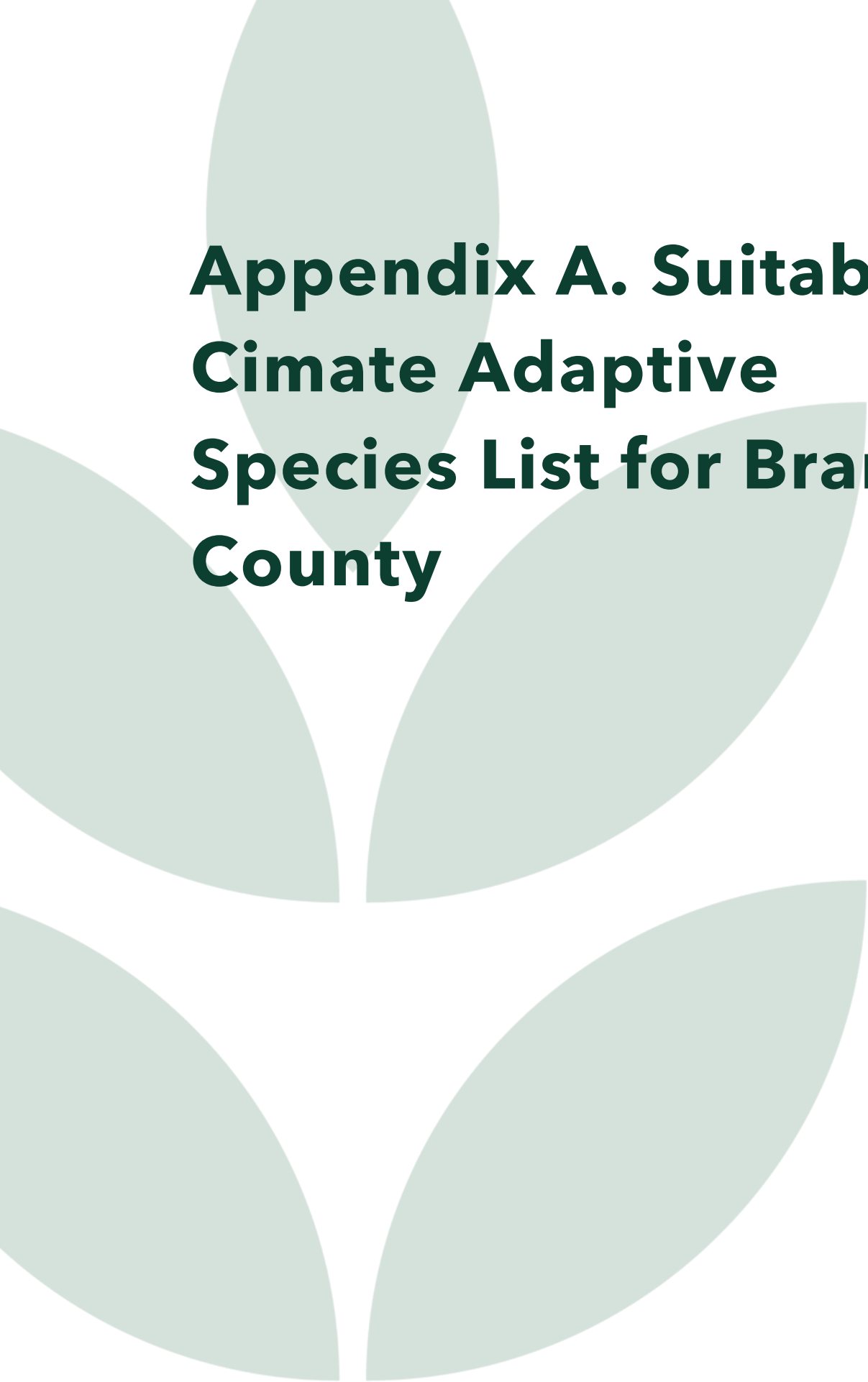
1) Estimated coverage based on existing datasets provided by the County



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Esri, USGS

The information displayed on this map has been compiled from various sources. While every effort has been made to accurately depict the information, this map should not be relied on as being a precise indicator of locations, features, or roads, nor as a guide to navigation. MNR data provided by Queen's Printer of Ontario. Use of the data in any derivative product does not constitute an endorsement by the MNR or the Ontario Government of such products.



A large, stylized graphic of a plant with five broad, light green leaves arranged in a fan-like pattern, centered on the page. The leaves are simple, rounded shapes with a slight curve, pointing outwards from a central point.

Appendix A. Suitable Climate Adaptive Species List for Brant County

Appendix A. Suitable climate adaptive species list for Brant County
 Brant County Community Forest Strategy

Common Name	Scientific Name	Tree (T) Shrub (S) Small arborescent (A)	G Rank ¹	S Rank ²	Local (Brant County) ³	ESA/SARO ⁴	COSEWIC ⁵	true native (Ontario) ⁶	native cultivar	nonnative (Ontario) ⁶	Native: candidate for assisted migration - genetics	Non- native: candidate for assisted migration - species
Autumn Blaze Maple	<i>Acer × freemanii 'Autumn Blaze'</i>	T	GNA	SNA	hyb	---	---		x			
Freeman Maple	<i>Acer × freemanii</i>	T	GNA	SNA	hyb	---	---	x				
Black Maple	<i>Acer nigrum</i>	T	G5	S4?	U	---	---	x				
Striped Maple	<i>Acer pensylvanicum</i>	A	G5	S4	---	---	---	x				
Red Maple	<i>Acer rubrum</i>	T	G5	S5	C	---	---	x	x			
'Armstrong' Red Maple	<i>Acer rubrum 'Armstrong'</i>	T	GNA	SNA	hyb	---	---		x			
Red Sunset® Maple	<i>Acer rubrum 'Franksred'</i>	T	GNA	SNA	hyb	---	---		x			
Silver Maple	<i>Acer saccharinum</i>	T	G5	S5	C	---	---	x				
Sugar Maple	<i>Acer saccharum</i>	T	G5	S5	C	---	---	x				
Celebration Maple	<i>Acer × freemanii Celebration</i>	T	GNA	SNA	hyb	---	---		x			
Sienna Glen Maple	<i>Acer × freemanii Sienna Glen</i> ®	T	GNA	SNA	hyb	---	---		x			
Yellow Buckeye	<i>Aesculus flava</i>	T	G5	SNA	---	---	---			x		x
Ohio Buckeye	<i>Aesculus glabra</i>	T	G5	S1	IR	---	---	x			x	
Downy Serviceberry	<i>Amelanchier arborea</i>	A	G5	S5	X	---	---	x				
Thicket Serviceberry	<i>Amelanchier canadensis</i>	S	G5	SNA	---	---	---			x		x
Smooth Serviceberry	<i>Amelanchier laevis</i>	A	G5	S5	X	---	---	x				
Black Chokeberry	<i>Aronia melanocarpa</i>	S	G5	S5	R	---	---	x			x	
Pawpaw	<i>Asimina triloba</i>	T	G5	S3	R	---	---	x				
Black Birch	<i>Bentula lenta</i>	T	G1	S1	---	END	END	x			x	
Yellow Birch	<i>Betula alleghaniensis</i>	T	G5	S5	C	---	---	x	x			
River Birch	<i>Betula nigra</i>	T	G5	---	---	---	---					x
Paper Birch	<i>Betula papyrifera</i>	T	G5	S5	C	---	---	x				
Blue-beech	<i>Carpinus caroliniana</i>	T	G5	S5	C	---	---	x				

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Bitternut Hickory	<i>Carya cordiformis</i>	T	G5	S5	C	---	---	x			x	
Pignut Hickory	<i>Carya glabra</i>	T	G5	S3	C	---	---	x			x	
Shellbark Hickory	<i>Carya laciniosa</i>	T	G5	S3	---	---	---	x				
Shagbark Hickory	<i>Carya ovata</i>	T	G5	S5	C	---	---	x			x	
American Chestnut	<i>Castanea dentata</i>	T	G3	S1S2	R	END	END	x	x			
Common Hackberry	<i>Celtis occidentalis</i>	T	G5	S4	U	---	---	x				
Eastern Buttonbush	<i>Cephalanthus occidentalis</i>	S	G5	S5	C	---	---	x			x	
Eastern Redbud	<i>Cercis canadensis</i>	T	G5	SX	IR	---	---	x			x	
Kentucky Yellowwood	<i>Cladrastis kentukea</i>	T	G4	SNA	---	---	---			x		x
Alternate-leaved Dogwood	<i>Cornus alternifolia</i>	A	G5	S5	C	---	---	x				
Eastern Flowering Dogwood	<i>Cornus florida</i>	A	G5	S2?	R	END	END	x				
Cockspur Hawthorn	<i>Crataegus crus-galli</i>	A	G5	S4	---	---	---	x				
Downy Hawthorn	<i>Crataegus mollis</i>	A	G5	S4S5	---	---	---	x				
Dotted Hawthorn	<i>Crataegus punctata</i>	A	G5	S5	X	---	---	x				
Fleshy Hawthorn	<i>Crataegus succulenta</i>	A	G5	S5	X	---	---	x				
American Beech	<i>Fagus grandifolia</i>	T	G5	S4	C	---	---	x	x			
White Ash	<i>Fraxinus americana</i>	T	G4	S4	C	---	---	x				
Black Ash	<i>Fraxinus nigra</i>	T	G5	S4	U	END	THR	x				
Red Ash	<i>Fraxinus pennsylvanica</i>	T	G4	S4	C	---	---	x				
Pumpkin Ash	<i>Fraxinus profunda</i>	T	G4	S1	---	END	END	x				
Blue Ash	<i>Fraxinus quadrangulata</i>	T	G4	S2?	---	THR	THR	x				
Honeylocust	<i>Gleditsia triacanthos</i>	T	G5	S2?	IX	---	---	x			x	
Skyline Honeylocust	<i>Gleditsia triacanthos ‘Skycole’</i>	T	G5	S2?	IX	---	---		x		x	

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Kentucky Coffee-tree	<i>Gymnocladus dioicus</i>	T	G5	S2	R	THR	THR	x				
Black Walnut	<i>Juglans nigra</i>	T	G5	S4?	C	---	---	x			x	
Eastern Red Cedar	<i>Juniperus virginiana</i>	T	G5	S5	C	---	---	x			x	
Tamarack	<i>Larix laricina</i>	T	G5	S5	R	---	---	x				
Northern Spicebush	<i>Lindera benzoin</i>	S	G5	S4	C	---	---				x	
Fruitless Sweet Gum	<i>Liquidambar styraciflua</i> 'Rotundiloba'	T	G5	SNA	---	---	---			x		x
Tulip Tree	<i>Liriodendron tulipifera</i>	T	G5	S4	?	---	---	x			x	
Cucumber Tree	<i>Magnolia acuminata</i>	T	G5	S2	---	END	END	x			x	
Forest Fire Black Gum	<i>Nyssa sylvantica</i> 'Forest Fire'	T	G5	S3	---	---	---		x		x	
Black Gum	<i>Nyssa sylvatica</i>	T	G5	S3	---	---	---	x			x	
Eastern Hop-hornbeam	<i>Ostrya virginiana</i>	T	G5	S5	C	---	---	x				
White Spruce	<i>Picea glauca</i>	T	G5	S5	X	---	---	x				
Black Spruce	<i>Picea mariana</i>	T	G5	S5	R	---	---	x				
Red Pine	<i>Pinus resinosa</i>	T	G5	S5	IR	---	---	x				
Eastern White Pine	<i>Pinus strobus</i>	T	G5	S5	C	---	---	x			x	
Sycamore	<i>Platanus occidentalis</i>	T	G5	S4	U	---	---	x			x	
Balsam Poplar	<i>Populus balsamifera</i>	T	G5	S5	U	---	---	x				
Eastern Cottonwood	<i>Populus deltoides</i>	T	G5	S5	---	---	----	x			x	
Large-toothed Aspen	<i>Populus grandidentata</i>	T	G5	S5	U	---	---	x			x	
Swamp Cottonwood	<i>Populus heterophylla</i>	T	G4G5	S1	---	---	---	x				
Trembling Aspen	<i>Populus tremuloides</i>	T	G5	S5	C	---	---	x				
American Plum	<i>Prunus americana</i>	A	G5	S4	U	---	---	x			x	
Pin Cherry	<i>Prunus pensylvanica</i>	S	G5	S5	R	---	---	x				
Black Cherry	<i>Prunus serotina</i>	T	G5	S5	C	---	---	x			x	

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Chokecherry	<i>Prunus virginiana</i>	A	G5	S5	C	---	---	x				
Common Hop-tree	<i>Ptelea trifoliata</i>	A	G5	S3	R	SC	SC	x				
White Oak	<i>Quercus alba</i>	T	G5	S5	C	---	---	x			x	
Swamp White Oak	<i>Quercus bicolor</i>	T	G5	S4	U	---	---	x			x	
Scarlet Oak	<i>Quercus coccinea</i>	T	G5	---	---	---	---					x
Northern Pin Oak	<i>Quercus ellipsoidalis</i>	T	G5	S3	U	---	---	x				
Bur Oak	<i>Quercus macrocarpa</i>	T	G5	S5	C	---	---	x			x	
Chinquapin Oak	<i>Quercus muehlenbergii</i>	T	G5	S4	R	---	---	x			x	
Swamp Pin Oak	<i>Quercus palustris</i>	T	G5	S4	?	---	---	x			x	
Northern Red Oak	<i>Quercus rubra</i>	T	G5	S5	C	---	---	x			x	
Shumard Oak	<i>Quercus shumardii</i>	T	G5	S3	---	SC	SC	x			x	
Black Oak	<i>Quercus velutina</i>	T	G5	S4	C	---	---	x			x	
Staghorn Sumac	<i>Rhus typhina</i>	S	G5	S5	C	---	---	x			x	
Peach-leaved Willow	<i>Salix amygdaloides</i>	S	G5	S5	X	---	---	x				
Black Willow	<i>Salix nigra</i>	T	G5	S4	U	---	---	x			x	
Common Elderberry	<i>Sambucus canadensis</i>	S	G5T5	S5	X	---	---	x			x	
Sassafras	<i>Sassafras albidum</i>	T	G5	S4	U	---	---	x			x	
Bladdernut	<i>Staphylea trifolia</i>	A	G5	S4	U	---	---	x			x	
Bald Cypress	<i>Taxodium distichum</i>	T	G5	---	---	---	---			x		x
Eastern White Cedar	<i>Thuja occidentalis</i>	T	G5	S5	C	---	---	x				
Basswood	<i>Tilia americana</i>	T	G5	S5	C	---	---	x			x	
'Redmond' American Linden	<i>Tilia americana 'Redmond'</i>	T	G5	S5	C	---	---		x			
Eastern Hemlock	<i>Tsuga canadensis</i>	T	G4G5	S5	C	---	---	x			x	
White Elm	<i>Ulmus americana</i>	T	G4	S5	C	---	---	x			x	

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Valley forge white elm	<i>Ulmus americana</i> 'Valley Forge'	T	G4	S5	C	---	---		x			
Slippery Elm	<i>Ulmus rubra</i>	T	G5	S5	X	---	---	x			x	
Rock Elm	<i>Ulmus thomasii</i>	T	G5	S4	R	---	---	x				
Accolade Elm	<i>Ulmus</i> ACCOLADE	T	---	---	---	---	---			x		
Princeton elm	<i>Ulmus americana</i> 'Princeton'	T	G4	S5	C	---	---		x			
Arrowwood Viburnum	<i>Viburnum dentatum</i>	S	G5	SNA	---	---	---			x		x

1. NHIC (Natural Heritage Information Centre). 2025. Ontario Vascular Plant Species List. 30 March 2025. Ontario Ministry of Natural Resources. <https://www.ontario.ca/page/get-natural-heritage-information>

G1 critically imperiled on a global scale; G2 imperiled on a global scale; G3 vulnerable on a global scale; G4 apparently secure on a global scale; G5 secure on a global scale; GX Presumed Extinct, Not located despite intensive searches and virtually no likelihood of rediscovery; GH Possibly Extinct, Missing; known from only historical occurrences but still some hope of rediscovery; G#G# Range Rank—A numeric range rank (e.g., G2G3) is used to indicate the range of uncertainty in the status of a species or community; GU Unrankable—Currently unrankable due to lack of information or due to substantially conflicting information about status or trends. Whenever possible, the most likely rank is assigned and the question mark qualifier is added (e.g., G2?) to express uncertainty, or a range rank (e.g., G2G3) is used to delineate the limits (range) of uncertainty; GNR Unranked—Global rank not yet assessed; GNA Not Applicable—A conservation status rank is not applicable because the species is not a suitable target for conservation activities; ? Inexact Numeric Rank—Denotes inexact numeric rank (e.g., G2?); Q Questionable taxonomy—Taxonomic distinctiveness of this entity at the current level is questionable; resolution of this uncertainty may result in change from a species to a subspecies or hybrid, or the inclusion of this taxon in another taxon, with the resulting taxon having a lower-priority conservation priority; C Captive or Cultivated Only—At present extant only in captivity or cultivation, or as a reintroduced population not yet established; T# Intraspecific Taxon (trinomial)—The status of infraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank. Rules for assigning T-ranks follow the same principles outlined above for global conservation status ranks. For example, the global rank of a critically imperiled subspecies of an otherwise widespread and common species would be G5T1. A T-rank cannot imply the subspecies or variety is more abundant than the species as a whole—for example, a G1T2 cannot occur.

2. NHIC (Natural Heritage Information Centre). 2025. Ontario Vascular Plant Species List. 30 March 2025. Ontario Ministry of Natural Resources. <https://www.ontario.ca/page/get-natural-heritage-information>

SX Presumed Extirpated; SH Possibly Extirpated (Historical); S1 Critically Imperiled; S2Imperiled; S3 Vulnerable; S4 Apparently Secure; S5 Secure; SNR Unranked; SU Unrankable (conflicting information about status or trends); SNA A conservation status rank is not applicable because the species is not a suitable target for conservation activities (e.g. an introduced species, or a species that has been recorded in Ontario but the observations were made at locations far outside the species' usual range); S#S# Range Rank (used to indicate any range of uncertainty about the status of the species or community). S? Not Ranked Yet; or if following a ranking, Rank Uncertain (e.g. S3?).

3. List of the Vascular Plants of Ontario's Carolinian Zone (Ecoregion 7E), March 2017

I - Introduced
C - Common
U - Uncommon
R - Rare

Appendix A. Suitable climate adaptive species list for Brant County
Brant County Community Forest Strategy

H - Historic record only (generally >30years)
X - Present; status unknown or not specified by source lists
? - unconfirmed report
hyb - Hybrid

4. NHIC (Natural Heritage Information Centre). 2025. Ontario Vascular Plant Species List. 30 March 2025. Ontario Ministry of Natural Resources. <https://www.ontario.ca/page/get-natural-heritage-information>

NAR Not At Risk; SC Special Concern; THR Threatened; END Endangered; EXP Extirpated; END-R Endangered (Regulated)

5. NHIC (Natural Heritage Information Centre). 2025. Ontario Vascular Plant Species List. 30 March 2025. Ontario Ministry of Natural Resources. <https://www.ontario.ca/page/get-natural-heritage-information>

NAR Not At Risk, a wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances; SC Special Concern, a wildlife species that may become threatened or endangered because of a combination of biological characteristics and identified threats; T Threatened, a wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction; E Endangered, a wildlife species facing imminent extirpation or extinction; XT Extirpated, a wildlife species that no longer exists in the wild in Canada, but exists elsewhere; X Extinct, a wildlife species that no longer exists.

6. NHIC (Natural Heritage Information Centre). 2025. Ontario Vascular Plant Species List. 30 March 2025. Ontario Ministry of Natural Resources. <https://www.ontario.ca/page/get-natural-heritage-information>

A large, stylized graphic of a plant with five leaves in a light sage green color. The leaves are arranged with one at the top and two pairs branching out downwards. The text is positioned in the upper left area, partially overlapping the top leaf.

Appendix B.

Existing Funding Opportunities

Appendix B. Existing Funding Opportunities Brant County Community Forest Strategy

Brant Grow Green Program

The Brant Grow Green program is administered by the Grand River Conservation Authority (GRCA) and the Long Point Conservation Authority (LPCA). Through this opportunity, property owners with two or more acres can apply to plant trees on their private property. The Climate Action Plan (2024) noted that the County contributes \$9,800 annually to the GRCA to support this program; and in 2023, the Grow Green program supported the planting of nearly 5,000 trees on private lands.

Adopt a Tree Program

The County's Climate Action Plan identifies a goal to implement an Adopt a Tree program to encourage more boulevard trees within neighbourhoods. Through this program, residents could request to have a tree planted in the boulevard fronting their home. The resident would then adopt the responsibility of watering and caring for the tree. This type of program has been implemented in a number of Canadian municipalities including Toronto, Calgary, Vancouver, and Kitchener.

Adopting a tree builds community ownership, strengthens partnerships between the County, residents, and local organizations, extends municipal capacity, and improves tree survival rates especially during critical establishment years.

GRCA Grand River Cover Crop Program

The Grand River Cover Crop Program is delivered by the Grand River Conservation Authority (GRCA) and provides financial incentives to farmers within the Grand River watershed to plant cover crops. The program helps reduce greenhouse gas emissions and enhances carbon sequestration, among other benefits. Priority is given to fields adjacent to watercourses/wetlands, tile-drained fields, or fields prone to erosion or wind damage. Benefits include erosion control and reduced nutrient runoff into waterways, improved soil health and structure, retention of nutrients, and contributing to climate resilience via soil carbon.

GRCA Rural Water Quality Program

The Rural Water Quality Program is a GRCA-administered grant program that supports a wide variety of best management practices (BMPs) on rural lands to improve water quality and soil health. Eligible and relevant practices include tree planting and streambank/stream buffer restoration.

Canadian Tree Fund - Jack Kimmel Grants

The Canadian Tree Fund's mission is to promote research and education within the arboriculture industry. Each year, the Jack Kimmel Grant is awarded to one or more applicants demonstrating the ability to conduct a project that promotes arboriculture research and education in Canada. These projects can cover a wide range of topics from urban forest management, plant health care, tree planting and establishment, root and soil management, tree risk assessment and worker safety, to education and outreach. The

Appendix B. Existing Funding Opportunities Brant County Community Forest Strategy

funding limit of this grant is flexible ranging between \$500 to \$15,000 including both full and partial funding depending on the project type and scope.

Evergreen - National School Grounds Greening

Evergreen's National School Ground Greening program partners with school boards and communities to turn schoolyards into dynamic, nature-filled spaces that support both play and learning. Through this program, Evergreen introduced the Climate Ready Schools project, aimed at enhancing the design, maintenance, and educational function of schools and their grounds by addressing flood risks, adapting to climate change, and supporting both students and the wider community beyond school hours. To assist schools in this effort, Evergreen provides step-by-step resources, training workshops, and access to a national network of design experts.

Local Enhancement & Appreciation of Forests (LEAF)

Local Enhancement & Appreciation of Forests (LEAF) is a not-for-profit organization designed for citizens of the Toronto, York Region and Durham Region, that aims to grow and sustain the urban forest by providing high quality services and programs that engage communities such as planting native species in backyards and public spaces. This is achieved through teaching the community about the importance of planting trees in urban landscapes, and caring for and maintaining the urban forest, fostering a sense of stewardship.

Ontario Trillium Foundation

The Ontario Trillium Foundation (OTF) invests in projects that aim to build healthy and vigorous communities in Ontario through helping eligible not-for-profit organizations deliver community-based programs and services. OTF offers two grants that support participation in the conservation and restoration of the environment. The first is the Seed Grant, which helps organizations, municipalities and First Nations improve the means with which they deliver programs and services that directly benefit the community. It is geared towards projects that focus on organizational planning, piloting new programs and building capacity to plan for future programs and services, with the duration being 6 or 12 months and the fund range from \$10,000 - \$100,000. A step up from this is the Grow Grant, which help organizations with already established programs and services to expand, improve or adapt existing programs that have proven to be successful in the realm of meeting community needs. The duration of the Grow Grant is 2 or 3 years with a fund range of \$100,00 to \$600,000.

Trees Canada - TD Green Streets, Greening Canada's School Grounds & Grow Clean Air Programs

The **Trees Canada - TD Green Streets Program** provides funding to support innovative practices in urban forestry focusing on revitalizing and growing healthy environments, as well as increasing awareness of the importance of urban forestry. TD is providing 20 grants and grant matching for up to \$15,000 to municipalities, First Nations communities and Business

Appendix B. Existing Funding Opportunities Brant County Community Forest Strategy

Improvement Associations (BIAs) for various tree planting, inventory, maintenance and educational activities they are involved in.

The **Trees Canada - Greening Canada's School Grounds Program** focuses on providing funding to projects that aim to transform empty schoolyards into vibrant outdoor classrooms, establish arboretums for experiential learning, and help students reconnect with nature. This program offers eligible projects funding of up to \$10,000 to support expenses such as buying and planting trees and shrubs, preparing the site, maintaining plantings, supplying planting materials, and creating educational resources. Once a project has been selected, Trees Canada pairs the project with a local Forestry Specialist to provide guidance, support and recommendations to ensure the project is successful.

The **Trees Canada - Grow Clean Air Program** helps individuals and businesses offset their carbon emissions by helping to protect old-growth trees in British Columbia's Bear Rainforest. This is achieved through ecosystem-based land management practices being implemented by coastal First Nations communities increasing the amount of carbon stored in the Great Bear Rainforest paired with the ability to donate to the program and purchase carbon credits where one credit equates to one tonne of carbon dioxide to be retired to the B.C. carbon registry. Taken together, this program supports the protection of old-growth forests, the preservation of biodiversity, as well as provides economic opportunities.

Growing Canada's Community Canopies (GCCC)

The Growing Canada's Community Canopies (GCCC) initiative assists communities in planting the right kinds of trees in the right places. GCCC provides support to communities of all sizes as well as all levels of urban forestry knowledge in the form of funding, coaching, training and learning resources. They offer two types of funding programs, Tree Planting funding and Urban Forestry Plans and Studies funding. The Tree Planting funding supports new planting projects with emphasis on the accessible, ambitious, resilient and equitable expansion of community canopies. Whereas, the Urban Forestry Plans and Studies funding helps to increase community capacity for the strategic management of community canopies over time.

Reep Green Solutions

Reep Green Solutions partners with municipalities and provide property owners with native street trees (current partners include the Cities of Kitchener and Cambridge). Included in the program is a personalized property consultation, one native tree, delivery and full planting services, as well as a care and maintenance guide. Using Kitchener's Tree Equity Scores, different regions throughout the city are eligible to receive one free native tree at the homeowner's request. As long as the planting location meets the program's requirements, Reep Green Solutions will plant a street tree that the homeowner is then responsible for caring for. More than one tree is available for an additional cost, and if a homeowner's property is not in the eligible area, they can participate in Reep Green Solutions' Backyard Tree Planting program and receive subsidized tree planting.

A large, stylized graphic of a plant with five leaves. The leaves are light green and have a smooth, curved shape. They are arranged in a symmetrical pattern, with one leaf at the top and four leaves below it, two on each side. The leaves are positioned behind the text.

Appendix C. Sample Details and Specifications

Appendix C. Sample Details and Specifications Brant County Community Forest Strategy

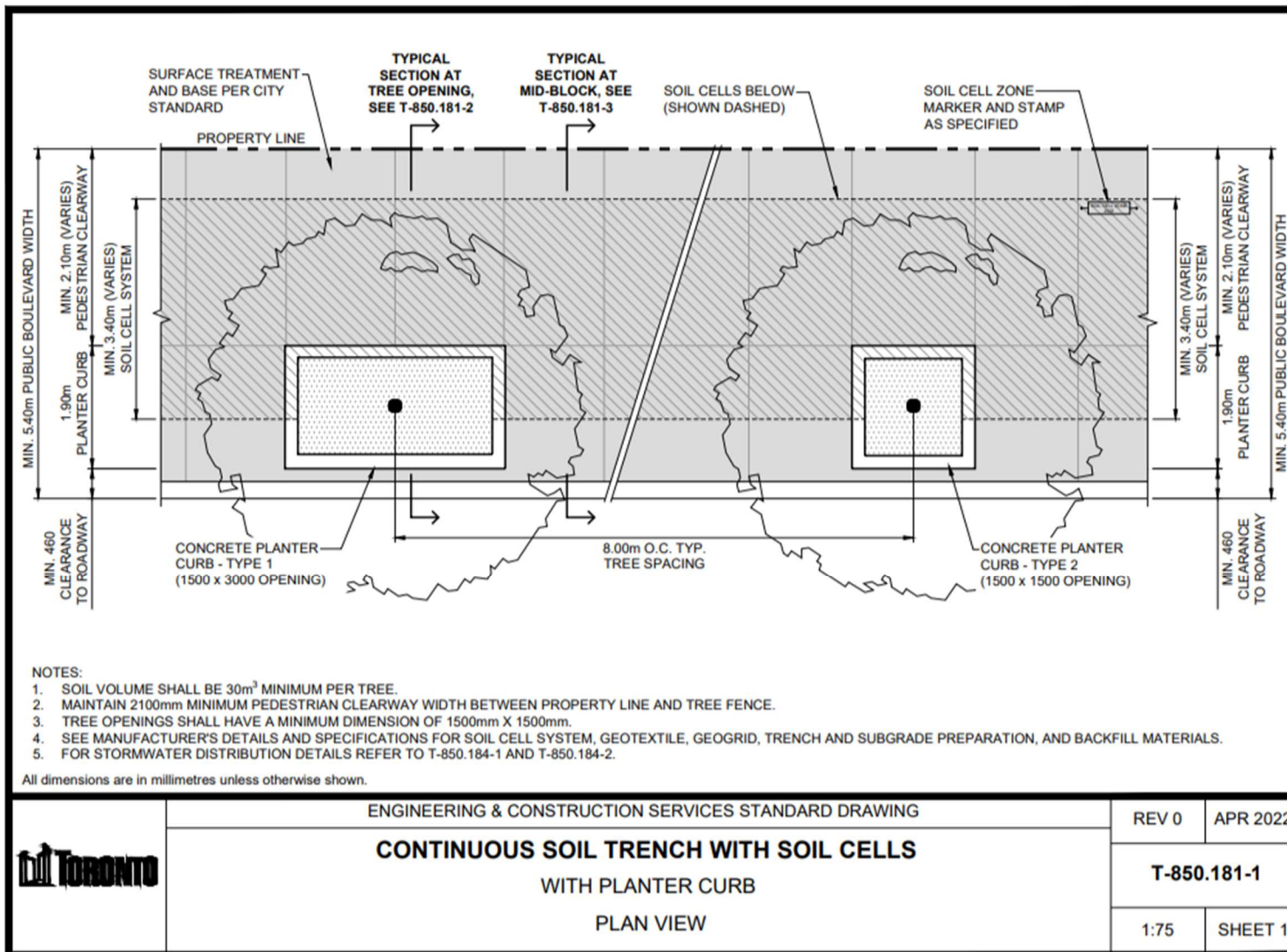


Figure 1. City of Toronto Continuous Soil Trench with Soil Cells (2022)

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Brant County Community Forest Strategy

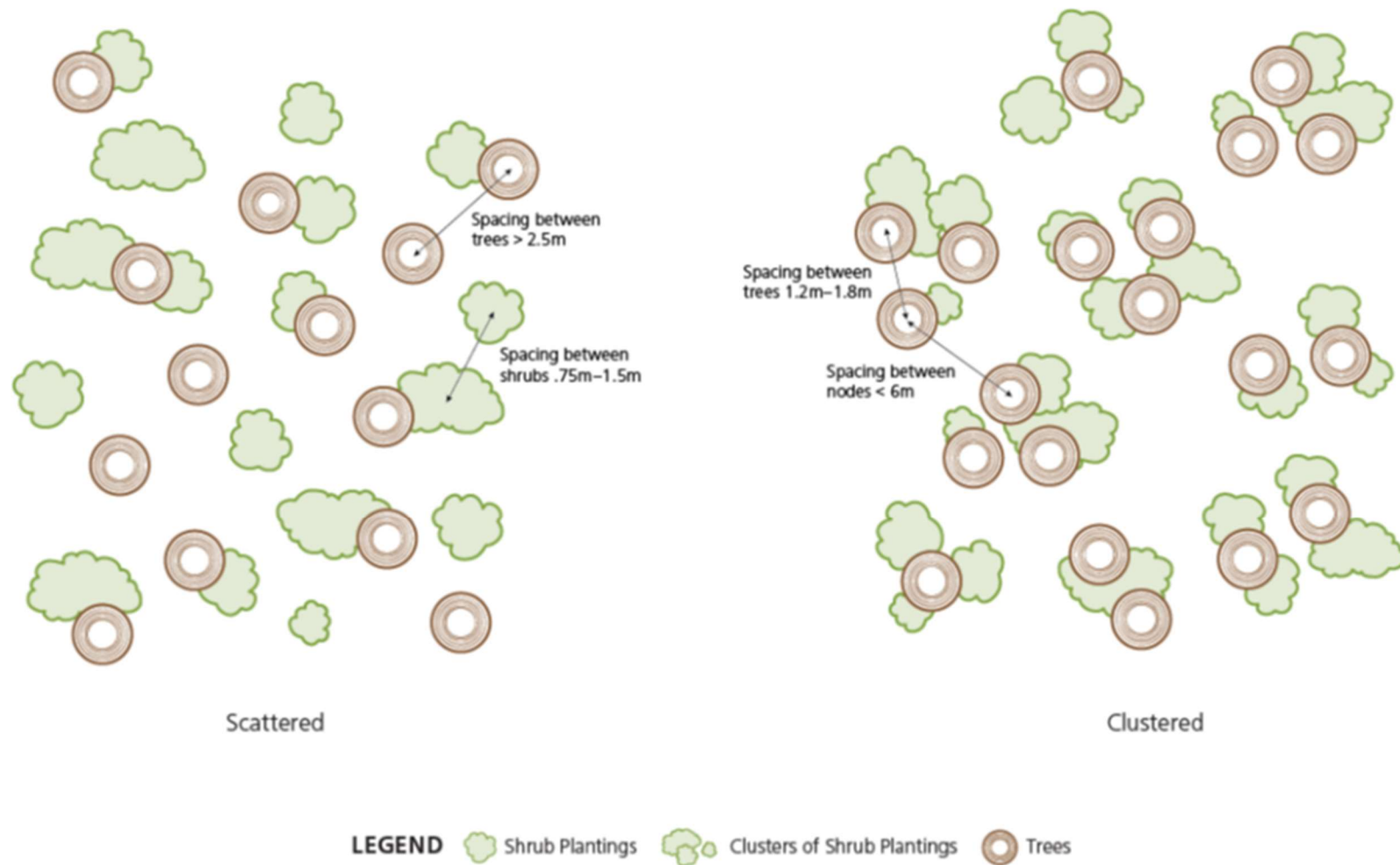


Figure 2. Clustered vs. scattered planting diagram (Conservation Halton, 2024).



REALIZING THE ECOLOGICAL POTENTIAL OF EVERY PLACE