

GRIMSBY BEACH TREE STRATEGY

Why should we have a Tree Strategy for Grimsby Beach?

The purpose of the Tree Strategy for Grimsby Beach is to identify key approaches and methods through which tree protection and tree replacement can be undertaken and maximized within the Grimsby Beach area. The strategy can identify several ways in which the existing tree canopy can be protected and enhanced. This can include specific tree protection and management policies and programs for Grimsby Beach as well as policies and programs that may apply Town wide but contain specific directions for the area. One of the key objectives of the Tree Strategy should be to promote an expanded urban forest in the area that exhibits health and resiliency.

"It is important to ensure that the community's urban forest is effectively managed to have a diverse and healthy population of indigenous tree species for generations to come." Grimsby Beach Resident



Source: Grimsby Beach Land Use Study Background Report

Why are Trees so important?

Trees are an important component of our urban areas and we are only beginning to recognize the tremendous value of a healthy urban forest. Trees perform infrastructural roles including stormwater management through root water uptake and respiration, urban heat island attenuation through shading, the provision of habitat for many species, and a way to increase resiliency in the face of climate change. Trees beautify the environment, provide psychological benefits and promote physical health in people. The economic value of a tree increases exponentially with age, with a cumulative value of \$160,000 plus per tree. Over 50 years one tree can produce \$31,250 of oxygen, \$37,500 of recycled water, and \$31,500 worth of erosion control (US Forest Service, ISA, 2013). Even the fastest growing and shortest lived trees will thrive for 50 years, and slower growing, longer living trees can thrive even longer.

A number of physical factors contribute to successful tree protection including soil conditions, environmental conditions and species adaptation. Sufficient soil volumes, quality soils that are not compacted, and access to adequate air and water are all key considerations to manage and maintain a healthy urban forest. Often the best place to grow trees is within protected natural heritage areas which provide for a natural surrounding environment. Urban and developed areas, however, can also provide for successful tree growth and provide the many benefits of trees where soil conditions and regular tree maintenance can be undertaken.

Many physical factors contribute to tree destruction including adverse environmental conditions (drought, erosion), insects and disease, and climate events (fire, flooding, ice storms). While many of these factors are difficult to control, the management of forests and specifically urban forests can be controlled through urban forest management practices to address declining tree health and tree removal.



Source: Grimsby Beach Land Use Study Background Report



What is unique about the urban forest in Grimsby Beach?

The urban forest in Grimsby Beach is defined as the trees located within the Grimsby Beach Land Use Study Area ("Study Area").



Source: Grimsby Beach Land Use Study Background Report

Trees within the Study Area are important for a number of reasons. Firstly, based on the inventory of trees completed through the Grimsby Beach Land Use Study and the inventory completed by local residents, at least 20 species of trees have been identified in the Study Area. While many are Carolinian species, many are the remnants of the old-growth forest that existed in the area at the time of settlement. Many of the trees are quite mature and include an Oak tree considered to be over 200 years old. Some of the trees are also non-native species. The tree community also includes a possible Butternut species. If these trees are found to be purebred and naturally occurring Butternut (Juglans cinerea), they will be classified as provincially endangered species per the Endangered Species Act.

The urban forest in Grimsby Beach also provides wildlife habitat and aesthetic amenities for people including shade, protection from the wind, and opportunities for bird watching. Trees and other vegetation along much of the Grimsby Beach shoreline also makes significant contributions to slope stability.

The existing trees are also a reflection of the rich and unique history of Grimsby Beach. The Grand Avenue Tree Stand is a designated cultural heritage resource under Section IV of the Ontario Heritage Act and includes the significant white oaks reflective of the area. Historically the area was considered an ideal gathering place for its scenic beauty and

the variety of mature trees which provided shade. Many of those trees can be found today in the original settlement areas, lots and park spaces and help to define the unique character of the Grimsby Beach community today.

The Grimsby Beach urban forest is of great importance to the community. This is reflected in the recent work by local residents and comments provided through the Grimsby Beach Land Use Study.

"A diverse urban forest contributes directly to the livability of our community and has been an inherent part of the history of Grimsby Beach. It is our desire that it be preserved and maintained for future generations. Our trees provide for wildlife habitat, they clean the amount of stormwater runoff, produce better air quality, reduce energy and infrastructure cots, and add to property values. They help to heal and calm the body and spirit, and provide a sense of place to this community." The Grimsby Beach Urban Forest (Grimsby Beach Residents)



Source: Grimsby Beach Land Use Study Background Report



What work was done through the Grimsby Beach Land Use Study to address Trees?

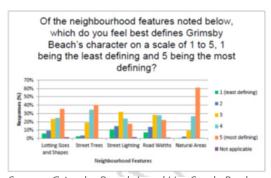
Through the Grimsby Beach Land Use Study, trees have been considered and addressed in a number of ways.

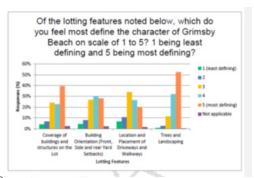


Source: Grimsby Beach Land Use Study Background Report

Community Consultation

Through the walking tour, initial community survey and online comments, trees and tree protection have been one of the most important elements to be addressed in the Grimsby Beach Land Use Study. This includes the importance of trees as a defining characteristic of the area and the character areas as defined in the Grimsby Beach Land Use Study and proposed Secondary Plan. It also includes the importance of trees as part of the cultural heritage landscape and the natural heritage landscape.





Source: Grimsby Beach Land Use Study Background Report

"A huge part of the essence of this community is trees. Many consider it the most important attribute."

- Stakeholder Advisory Committee member

Background Report - Land Use Policy Assessment

The current land use planning policy framework in Ontario that applies to Grimsby Beach includes the Provincial Policy Statement, the Growth Plan, the Greenbelt Plan, the Region of Niagara Official Plan and the Town of Grimsby Official Plan. All of these plans and layers of policy provide for the general protection and enhancement of natural heritage systems including significant woodlands and woodlots, cultural heritage landscapes and recognize the importance of street trees as part of our green infrastructure.

Background Report - Natural Heritage Evaluation and Tree Inventory

As part of the Background Report completed for the Grimsby Beach Land Use Study, a natural heritage evaluation of the Study Area was undertaken. The evaluation included an inventory of trees in the Study Area.

Many of the trees within the Study Area are Carolinian species, and the remnants of the old-growth forest that existed in the area at the time of settlement. The Butternut, one of which is located in the vicinity of 19 Fair Street, if naturally occurring may be considered a provincially endangered species under the Endangered Species Act in Ontario.

Six tree species found in Grimsby Beach are non-native, including Norway Maple, Tree of Heaven, Siberian Elm, Horse Chestnut, English Walnut, and Norway Spruce. Manitoba Maple, Tree of Heaven, Norway Maple, Siberian Elm and Red Maple are often considered invasive, with Norway Spruce, Colorado Blue Spruce, and Sassafras being largely ornamental.

Tree Species in Grimsby Beach

Common Name	Scientific Name	Comments
Sugar Maple	Acer saccharum	
Manitoba Maple	Acer negundo	- sometimes considered invasive
White Ash	Fraxinus americana	- few white ash remain, with most having been removed because of succumbing to the emerald ash borer
Red Oak	Quercus rubra	
Black Walnut	Juglans nigra	
Tree of Heaven	Ailanthus altissima	- exotic, invasive
Honey Locust	Gleditsia triacanthos	
Norway Maple	Acer platanoides	- exotic, invasive
Colorado Blue Spruce	Picea pungens	- often an ornamental tree
Siberian Elm	Ulmus pumila	- exotic, invasive
Basswood	Tilia americana	
Shagbark Hickory	Carya ovata	
Silver Maple	Acer saccharinum	
Horse Chestnut	Aesculus hippocastanum	exotic
Black Cherry	Prunus serotina	



Butternut	Juglans cinerea	
English Walnut	Juglans regia	
Norway Spruce	Picea abies	- exotic, often an ornamental tree
Red Maple	Acer rubrum	
Sassafras	Sassafras sp.	- often an ornamental tree

Culturally, the tree community in Grimsby Beach provides aesthetic amenities, shade, and opportunities for bird watching. To wildlife, this urban forest provides nesting habitat, food, and stop-over habitat for migrating birds as well as shelter and food for a range of small mammals. Interestingly, several "snags" or "wildlife trees" were noted in the Study Area in the Background Study. Such trees have cavities, curled bark, decay, or niches that may be used as maternal roosting habitat for bats. The trees and other flora along the shoreline of the Study Area also contribute significantly to the shoreline's slope stability.



Source: Grimsby Beach Land Use Study Background Report

Background Report - Character Areas

The Background Report provides an assessment of the three identified character areas in Grimsby Beach that include the Core Area, Northwest Area and South Area. In describing the character of those areas, key features such as the shoreline, green space and abundance of mature trees are identified. The abundance of mature trees and other vegetation throughout all three character areas signifies the importance of the tree and landscaped features in Grimsby Beach.

What Approaches were considered through the Grimsby Beach Land Use Study to address Trees?

There are various methods of tree protection and tree canopy enhancement used in Ontario. This includes the protection of environmental areas, the protection of significant woodlands in the Provincial Policy Statement, and by-laws that can protect significant woodlots. Tree protection is not specifically regulated under the Planning Act

(except for woodlands) but can be generally provided through policies, guidelines, and heritage tools. Specific tree protection by-laws can also be provided under the Municipal Act. In addition, municipalities can provide other tree protection strategies though their Parks and Forestry departments, or through Open Space Programs, as well as urban forest management plans, tree protection plans and community education and planting programs. In order to properly address the range of options and approaches available for the Study Area, several examples were provided which have been implemented in areas similar in context to Grimsby Beach. Information on the approaches to tree protection and the examples were presented through the public visioning session of the Grimsby Beach Land Use Study and were also included in a follow up community survey.



Source: Grimsby Beach Land Use Study Background Report

It was clearly stated throughout the Grimsby Beach Land Use Study process that tree protection and tree replacement would need to be an integral part of any recommendations. Based on the feedback provided through the public visioning workshop, community survey and work completed by the community, a multi-pronged approach to tree protection was recommended with the development of a Tree Strategy that would set out a wide range of approaches and tools to be further developed.



Source: Grimsby Beach Land Use Study Background Report



What strategies and programs are recommended for the Tree Strategy?

As a result of the work completed through the Grimsby Beach Land Use Study and the input from the community, a range of programs and policies are recommended as part of the Tree Strategy. Some of these strategies have been completed and are proposed for further review (Secondary Plan policies, Urban Design and Heritage Guidelines). Some have been completed through the Background Report and by community members (tree inventories) and will provide an excellent source of base information and inform the further development of a possible Tree Management Plan/Urban Forest Management Plan to be further developed. All of these strategies, when combined and coordinated, can reflect a comprehensive approach to tree protection and tree management for Grimsby Beach.

It should be noted that any further consideration for further plans and programs will involve significant resources (operational and staffing costs.) to be implemented. Such costs should be properly assessed and included in any further consideration of programs and policies by Council.

Policies and Guidelines

Within the Draft Secondary Plan, a number of additional objectives and policies have been proposed to specifically address trees and tree protection. These include:

- **Goal:** The goal of the Grimsby Beach Secondary Plan is to guide change that maintains and enhances the unique character of the Study Area while protecting and conserving the natural and cultural heritage features of the Study Area including the shoreline, trees, open spaces and parks.
- **Objective:** Protecting and replenishing trees and canopy cover by including policies that recognize trees as a key element to the character of the Study Area; and ensuring the tree canopy within the Study Area is enhanced.
- Character Area Policies: Landscaped open space and trees shall be protected and enhanced.
- **Tree Protection Policies:** Trees are a distinctive landscape and character feature within the Grimsby Beach Secondary Plan Area. A key objective in the Secondary Plan is to encourage the preservation of existing trees and the planting of new trees through infill development and replacement housing through the site plan approval process where applicable.
 - The wooded areas within the Study Area and in the South Character Area consist of both the designated Grand Old White Oak Tree Stand and the existing woodlot within the Environmental Protection Area. Both areas should continue to be protected through the existing land use and heritage designations.
 - An overall Tree Strategy shall be developed and used to address tree protection and tree canopy enhancement. The Tree Strategy shall include a Tree Management Plan for the Grimsby Beach Study Area that should be undertaken to provide guidance on the removal and replanting of trees and vegetation on public and private lands.

• **Implementation Policies:** Any development application will require the preservation of landscaped open space areas and the protection of existing trees as well as tree protection. Where trees cannot be maintained, a site tree replacement plan will be required.

Within the Draft Urban Design and Heritage Guidelines proposed for Grimsby Beach, a number of specific guidelines for tree protection are also provided including the following:

- Defined Heritage Attributes: Trees and vegetation are defined for each of the Grimsby Beach Character Areas
- **Streetscape Improvements:** Guidelines to maintain and reinforce the identified character of the residential streetscapes including varied setbacks and protection of large mature trees. Consideration is required for the presence and location of mature trees when locating pathways in order to maintain mature trees whenever possible.
- Landscaping Guidelines: Infill projects shall protect and incorporate existing trees, tree stands, and vegetation where possible. Where trees are to be removed, it should be shown that alternative measures such as pruning are impractical, and suitable replacement trees should be planted and maintained elsewhere on a development site. Mature trees, vegetation and landscape features located on properties of cultural heritage value or interest which contribute to the heritage character of Grimsby Beach should be retained, wherever possible.

Tree Management Plan/Urban Forest Management Plan

The development of a Tree Management Plan or an Urban Forest Management Plan (Note: while either title can be used, the balance of the Tree Strategy will reference an Urban Forest Management Plan) for Grimsby Beach is a key recommendation of the Tree Strategy. An Urban Forest Management Plan should include the components described in this section of the strategy. These are suggested components and guidelines that will need to be further developed and specified for certain species and locations within the Study Area. It is recommended that these components and guidelines be used as a base to further develop an Urban Forest Management Plan for Grimsby Beach.

It should also be noted that many of the components would only be applicable in a municipal-wide context and would rely on the commitment of significant resources for such programs to be achievable. Many municipalities have found that the components that involve enforcement are too intensive and require significant staffing resources which are not available. Many municipalities may choose to focus on a more proactive and educational approach to their Tree Management Plan or Urban Forest Management Plan whether for a small area or if applied to the whole municipality. This should be taken into consideration given the Grimsby Beach and Town of Grimsby context.

Tree Inventory

Understanding the composition and condition of trees within the Study Area is a key first step in the development of any Tree Management Plan or Urban Forest Management Plan. An inventory of trees within Grimsby Beach was



competed as part of the Grimsby Beach Land Use Study, as noted, and was also carried out by a local Grimsby resident.

The information provided by the local community when combined with the Background Report inventory provides for an excellent base of information to understand the existing species, age, size and condition of the trees. The residents' tree inventory also identifies tree locations within the Study Area.

The local tree inventory recorded the diameter, height and age of each tree in the three parks and three greenspaces within the Grimsby Beach Study Area described as follows:

- 1. Bell Park;
- 2. Grimsby Beach Park on Victoria Terrace;
- 3. Phelps Avenue;
- 4. The Grand Old White Oak Tree Stand;
- 5. Woodland area behind Grand Avenue School; and,
- 6. Betts Avenue Woodlot



Source: Community Tree Inventory

The local tree inventory found that there were 22 species of trees on Victoria Terrance and Bell Park, of which 15 are indigenous to Ontario. The inventory also found that there were over 40 historic trees that are either rare, endangered, or over the age of 150 year years; 12 of which are located on private property. Trees located in Victoria Terrance such as White Oak, Sugar Maple, Shagbark Hickory will likely be replaced by non-indigenous trees that may come to dominate and create a canopy that is less diverse and has a shorter life expectancy. A Butternut was also identified on the bluff area.

It is recommended that a consolidated tree inventory be compiled to form the base of information for the Urban Forest Management Plan for the area.

Tree Protection

Existing trees are the greatest asset of the urban forest and continuous effort should be made to preserve healthy mature trees. Opportunities to preserve trees should be looked at early in any development approval process to increase the likelihood of success for the protection of trees. When existing trees must be removed, replacement tree plantings should strive to provide equivalent benefits to the community. In determining the value of trees, resources and tools such as the guide to planting provided by the Council for Tree & Landscape Appraisers may be considered when preservation or replacement plantings are not possible.

Existing tree preservation should prioritize large mature shade trees, which may have heritage value, native trees, and trees which can be managed as a group. In particular, the preservation of trees located at the perimeter of lots can often provide buffering between properties.

Tree preservation should consider the extent of trees above and below ground, and the understanding that any development can impact the roots of trees on adjacent properties. A tree protection zone is often used to represents the minimum rooting area that is essential for a tree's structural integrity and health. Tree protection zones should be determined in consultation with an International Society of Arborists (ISA) certified arborist or otherwise qualified tree care professional.

Tree Replacement - Ratios and Locations

Guidelines for tree replacement whether due to damaged trees or tree removal through development may establish tree replacement ratios which are often provided at 2 or 3 to 1 and locations for tree replacement. Such ratios should be reflective of tree canopy replacement (i.e. removal of a larger mature tree may require planting of multiple trees in a prescribed location). The locations for new trees as a result of tree replacement should follow the tree planting considerations noted below.

Tree Planting - Conditions and Maintenance

Soils

The type and amount of soil for canopy trees is critically important. There are a range of recommendations regarding the appropriate soil volume to be provided for new trees and the amount varies depending on surrounding conditions and location (urban versus natural area).

It is recommended that the Urban Forest Management Plan for the Study Area ensure sufficient soil volumes are provided to support new trees based on location and type of tree.

Planting Locations

Given the existing mature tree canopy within the open space areas and private lots within the Grimsby, there are limited areas to plant new trees. Open space areas and parks make up the majority of planting environments



with suitable conditions within Grimsby Beach. Generally, there should not be an issue in achieving the required soil volumes that promote healthy tree growth in these areas. However, in measuring available soil volume, only contiguous areas of lawn or soil should be considered. The use of the open space areas should also be considered to ensure areas for passive recreation are also maintained. In the shoreline areas there may be opportunities for tree and vegetation planting to enhance slope stability. Further consideration of appropriate tree and vegetation planting in these areas should be considered with the additional assessment of these areas.



Source: Grimsby Beach Land Use Study Background Report

Diversity of Planting and Species Selection

Tree species selection should be performance based, with the right tree matched to the right location. Trees provide the most benefits to the community when they can grow for many years and attain their natural mature size. The selection of trees for individual sites must give careful consideration to the existing conditions and potential barriers to their success, including soil type, moisture, available growing space above and below ground, and proximity to sidewalks, roads and utilities. Guidance on appropriate species of trees should be taken from the Niagara Region Master Tree Planting List as well as identified native species of trees such as white pine, sugar maple, shagbark hickory and white oak which grow into maturity and provide a dense tree canopy.

Biodiversity is founded on ecological principles with a host of benefits, but of particular importance is the establishment of resiliency. The International Society of Arboriculture's (ISA) best practices promote species selection for planting based on the following guidelines:

- no more than 30% from the same family;
- no more than 20% from the same genus; and
- no more than 10% from the same species.

The purpose of this allocation is to prevent the same kind of monoculture that devastated the trees in municipalities including the American Chestnut, American Elm, and Ash trees. Many species today are under threat from pests and diseases, and diversity of planting will help to ensure the urban forest is more resilient and remains green when pests and diseases inevitably strike.

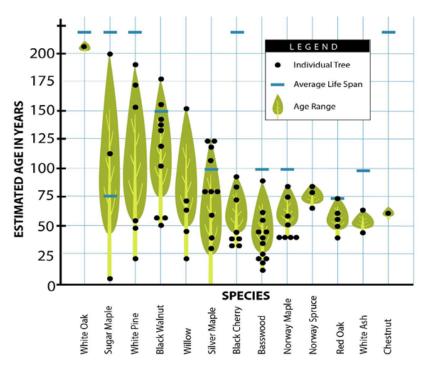
Species such as Oak and Maple may be subject to pests and pathogens in the near future such as Oak Wilt, and Gypsy Moths, which is why it is important to look forward towards issues that may impact these trees. These species

should still be planted, but must not be over planted. Monoculture plantings of a single species should not be used so future pathogens cannot create widespread mortality. Promoting Carolinian species is a unique way that Grimsby can increase urban forest diversity and resiliency against climate change and northward moving pathogens.

As not all trees are suitable for all locations, tree species should be selected which possess the characteristics that most closely meet the environmental conditions of each site, with the gradient of diversity increasing as the quality of the planting site increases. For example, the tree inventory found three sugar maples compared to eighteen Norway Maples. Norway Maples provide for a good tree canopy, however they are invasive and do not tend to support the indigenous plants and animals that naturally live there.

Tree Growth Rates

Growth rates of trees are based on the fact that different species grow at different rates and have different life expectancies. Generally, fast growing species do not live as long compared to slow growing species. The local tree inventory included the figure below that identified the variation of growth rates by species. By mixing slow and faster growing trees throughout an area, it can help to ensure that a green canopy is achieved as quickly as possible, and that it remains green over time.



Source: Grimsby Beach Urban Forest (Grimsby Beach Residents)

Natural Areas and Shorelines

In naturalized areas, particularly in proximity to shorelines and forested areas, native species should be planted. Invasive species which have negative impacts do the most harm when they can escape cultivation into the habitat of native species which they are able to outcompete.

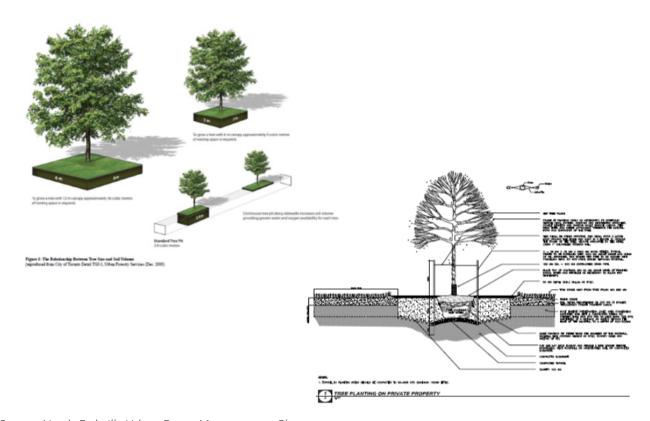
Plantings along the shoreline should take into account the lake levels and hazard limits. Many tree species which are urban and drought tolerant are intolerant of standing water. Some species which are tolerant of flooding, like Silver



Maple, River Birch, Poplars and Willows, have other characteristics which can be problematic, like weak wood or poor disease resistance. These species should only be considered if they can be located in areas where their vulnerability to storm damage will not cause any safety hazards

Planting Details

It is important to provide for details related to tree planning through measures such as tree planting profile drawings. Such drawings for various species may include planning depths, soils, supports or tree guards as well as spacing details depending on the species' growth rates. The Urban Forest Management Plan can provide planting details through drawings and profiles for different species that can then be used by the Town and residents to ensure the best planting environments for new trees.



Source: North Oakville Urban Forest Management Plan

Tree Maintenance

A tree maintenance program for new tree plantings as well as regular maintenance should form part of the Urban Forest Management Plan. Maintenance may include watering and fertilization, root protection, as well as pruning. Maintenance should include monitoring of drainage around a trees root system. Regular monitoring of roots to remove debris and maintain well drained areas around tree roots should be included as part of the maintenance program.

Regular pruning and general tree maintenance for existing trees should be incorporated into the Urban Forest Management Plan to ensure healthy growth through seasonal cycles. Regular maintenance should also include inspections and tree cutting following major storm events or other events that may cause damage to trees or where dead or injured trees need to be addressed for safety.

Monitoring

A critical component of any Urban Forest Management Plan is regular monitoring of existing and newly planted trees and their conditions. Such monitoring programs can also incorporate pro-active preventative programs associate with pests and diseases.

It is recommended that Carolinian species are incorporated into the plantings in park and natural areas, and that these trees are monitored to collect data on their performance. Producing an urban forest inventory is one way to understand the strengths and vulnerabilities of the local tree canopy, but will require an investment of staff and other resources.

Tree Protection By-laws

Specific tree protection by-laws can be provided under the Municipal Act. They are a tool that enable municipalities to prohibit and regulate the removal of trees on public and/or private property. Typically Tree Protection By-laws require municipally issued permits for the removal of trees on private property. The permitting process requires applicants to provide an arborist report and for municipal staff to review the applications. While these by-laws can be useful in the protection of trees, they come with challenges of administration, high costs and enforcement.

A Tree Protection By-law could be further considered in Grimsby Beach Study Area to regulate and prohibit the removal of trees on private property as a means to preserve tree canopy. A number of recent tree protection by-laws should be further reviewed to identify best practices and to consider the most appropriate approach for Grimsby Beach. Such a by-law may also be more appropriate as a pilot program for the Town given the resources and costs involved for a Town wide by-law.

Examples of recent municipal tree protection by-laws include the following:

Municipality of Clarington

The Municipality of Clarington has a Woodlot Preservation By-law, which prohibits and regulates the destruction of trees to protect wooded areas in the municipality. In addition to municipal tree permits, the Region of Durham requires a Good Forestry p defines a "Woodland" as a treed area one hectare in size and greater, but does not include orchards, tree nurseries or Christmas tree plantations.

https://weblink.clarington.net/WebLink/DocView.aspx?id=5342&searchid=9d100f6d-61c7-4d26-aa96-02105575ab45&dbid=0

City of Guelph

The City of Guelph has a Private Tree By-law which regulates the destruction or injury of trees. The By-law provides policies for regulated trees, which are any species of deciduous or coniferous growing woody perennial plant that can reach a certain height and diameter on a lot larger than 0.2 hectares. The By-law also provides a list of exceptions for dead or dying trees, trees posing danger to life or property or trees impacted by natural events or unforeseen causes.

https://guelph.ca/wp-content/uploads/TreeBylaw.pdf



Community Tree Programs



Source: Tree Planting Program St. Catharines

Community Tree Programs can provide both educational tools that teach residents about the importance of trees and stewardship as well as initiatives for tree planting, maintenance and canopy enhancement. Examples may include tree giveaway programs that provide residents with indigenous trees to plant that will enhance and grow the urban forest. Other programs may include an "adopt a tree" program where residents can plant their own trees in Grimsby Beach and take on the responsibility to look after them through a supportive educational program.

Community programs will require a commitment from community members and Town staff to work together on programs and initiatives that should include consideration of the following:

- Monitoring and updating of tree inventories;
- Program to maintain and preserve mature trees;
- Planting program for indigenous/Carolinian trees in defined areas;
- Develop a maintenance/adopt a tree program for newly planted trees;
- Develop a guided tree walk for visitors (QR code);
- Consider conservation and preservation of significant tree stands in Bell Park, Victoria Terrace, Grand Avenue, Phelps Avenue, Betts/Birchpark area; and,
- Identification of trees requiring maintenance and removal due to safety concerns.

Examples of community tree programs are listed below and should also be further considered to develop an appropriate program for Grimsby Beach or as part of a Town wide program that could be a joint program with the Conservation Authority:

City of St. Catharines

Since 2017, The City of St. Catharines has hosted a tree giveaway to residents as a means to grow the urban forest. Information regarding the types of trees are available on their City's website before the pick-up date. The Tree Giveaway event is typically held in the spring and the fall.

https://www.stcatharines.ca/en/livein/Trees.asp

City of Burlington

The City of Burlington has a Tree Planting program that offers free trees to residents. The trees are to be planted in the municipally owned right of way in front of the resident's property. This program accepts tree requests throughout the year.

https://www.burlington.ca/en/services-for-you/tree-planting-and-care.asp



Source: Grimsby Beach Land Use Study Background Report



Reference Materials

US Forest Service, ISA, 2013

Landscape Ontario. (2013). Benefits of Trees. https://landscapeontario.com/benefits-of-trees

Grimsby Beach Land Use Study Background Report (2021)

Community Tree Inventory (Grimsby Beach Residents) 2021

Grimsby Beach Urban Forest Presentation (Grimsby Beach Residents) 2021

Council for Tree and Landscape Appraisers – Appraisal Guide https://www.isa-arbor.com/Portals/0/Assets/PDF/News/2016-09-14-ctla-10th-guide-overview.pdf

International Society of Arboriculture's (ISA) Best Practices https://www.isa-arbor.com

North Oakville Urban Forest Management Plan https://www.oakville.ca/townhall/north-oakville-urban-forest-strategic-management-plan.html

Oakville Tree Planting Guides https://www.oakville.ca/residents/trees-planting.html

Guiding Urban Forestry Policy into the Next Decade: A Private Tree Protection & Management Practice Guide, University of Waterloo Plan 721, July 2020 https://uwaterloo.ca/planning/sites/ca.planning/files/uploads/files/privatetreeprotectionandmanagementpracticeguide_october2020.pdf



KITCHENER
WOODBRIDGE
LONDON
KINGSTON
BARRIE
BURLINGTON