

## Municipality Of Chatham-Kent

### Community Development

**To:** Mayor and Members of Council

**From:** Gabriel Clarke MES, BA,  
Environmental Planner I, Planning Services

**Date:** September 8, 2020

**Subject:** Rural and Urban Tree Cover in Chatham-Kent

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#### Recommendations

It is recommended that:

1. Administration and the LTVCA continue to collaborate on the Natural Heritage Strategy and the climate change action planning process, which will involve:
  - a) Implementing the Alternative Land Use Services Program which encourages rural landowners to undertake stewardship activities (i.e. tree plantings, native prairie plantings, wetland restorations, etc.) through education and incentives.
  - b) Continuing to review opportunities for tree planting on publicly owned lands.
  - c) Completing a municipal-wide Geographic Information Systems (GIS) based tree canopy change assessment to understand how tree canopy cover has changed in Chatham-Kent between the years 2010, 2015 and 2020 and reporting the findings back to Council.
2. Administration be directed to undertake the following actions to enhance the community's urban street trees as resources and budgets permit:
  - a) Implementing the "avoid harm → minimize harm → replace tree" hierarchy for future municipally-led public construction works that have the potential to impact municipally-owned street trees. The specific locations for tree replacements will be determined on project-by-project basis.
  - b) Completing an urban street tree inventory and condition assessment to capture the following information for each street tree: tree species, general health, dollar value of ecosystem services generated, approximate age, etc. The street tree inventory will be completed for all primary and secondary urban centres throughout Chatham-Kent as resources allow. With current resources, Public Works estimates it will take approximately 10 years to complete the entire assessment.
  - c) Integrating the results from the urban street tree inventory into the Municipality's Corporate Asset Management program.

- d) In the interim, Council consider having Public Works implement a cut-a-tree, replace-a-tree program at an annual cost of \$75,000 per year to be considered during the 2021 budget deliberations.
- e) Exploring service enhancements to street tree maintenance and replacement programs along with budget implications and reporting back to Council if the tree inventory and condition assessment suggest that such enhancements will benefit the community.

### **Background**

At the November 4, 2019 meeting, Council approved the following Motion:

“Whereas the municipality of Chatham-Kent recognizes the significance of tree cover as an important part of a balanced and healthy ecosystem.

And whereas the municipality of Chatham-Kent has less than six per cent natural cover, including trees, wetlands, grassland and pollinator habitat, the lowest percentage for an upper tier municipality in Ontario.

And whereas it is important ecologically to reduce fragmentation of such cover and increase wildlife corridors and wherever possible establish grass buffer strips to keep soil on the land and out of our drains and waterways.

And whereas we believe there is a role the municipality can play in partnering and consulting with conservation groups, community partners and private landowners.

Be it therefore resolved that council direct municipal staff to prepare a report with the aim of:

- a) Planting a minimum of one million trees within four years.
- b) Identifying public lands than can be used to support this initiative.
- c) Identifying best practices from other municipalities on this subject.
- d) Identifying ways to incentivize land owners to plant and maintain tree cover and other natural habitat.
- e) Identifying any potential community partners who can help the municipality achieve its goal.”

In addition to this, at the May 25, 2020 meeting, Council approved the following Motion:

“That the municipality of Chatham-Kent develop and implement a street tree cover policy, to maintain and encourage tree coverage by continuing active surveillance and maintenance of trees on municipal right of ways, including replacement when required.”

Since both matters related to trees, the purpose of this report is to address both Motions.

## **Comments**

### **Trees and Climate Change**

As noted in the Climate Change Action Plan Terms of Reference, trees provide a wide range of community benefits, including, but not limited to the following:

- They contribute to the aesthetics of urban neighbourhoods and their presence – especially older mature trees – contribute to building a “sense of place” and increases the value of adjacent properties.
- Trees are important contributors from a human health perspective as a result of their documented ability to enhance human health and happiness<sup>1</sup>.
- Trees provide critical habitat and strengthen local biodiversity.
- In rural areas, shelterbelt trees can increase soil moisture content, reduce soil erosion, reduce snow drift onto roadways, and act as wildlife corridors<sup>2</sup>.
- Trees can reduce cooling demands in the summer and heating demands in the winter when located adjacent to buildings<sup>3</sup>.

From a climate change perspective, trees are important instruments to mitigate climate change because of their ability to sequester carbon in their limbs, trunks and in the soil. Trees are also important from an adaptation/resilience stand point thanks to their ability to produce shade and reducing energy costs by limiting the urban heat island effect and because of their ability to capture, clean and gradually release storm water which reduces storm water management costs.

### **Planting a minimum of one million trees within four years.**

#### **Land Required to Plant One (1) Million Trees**

Accommodating the planting of one million trees will require a total of approximately 1700 acres of land over the 4 year period, or approximately 425 acres per year. Figure 1 (below) illustrates the formula used to calculate the amount of native Carolinian deciduous trees that can be planted on 1 acre. Figure 2 (below) illustrates the amount of land required to plant 1 million deciduous trees.

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<sup>1</sup> <http://www.bbc.com/earth/story/20160420-how-nature-is-good-for-our-health-and-happiness>

<sup>2</sup> <https://www5.agr.gc.ca/eng/science-and-innovation/agricultural-practices/agroforestry/benefits-of-agroforestry/?id=1344633257343>

<sup>3</sup> Ibid.

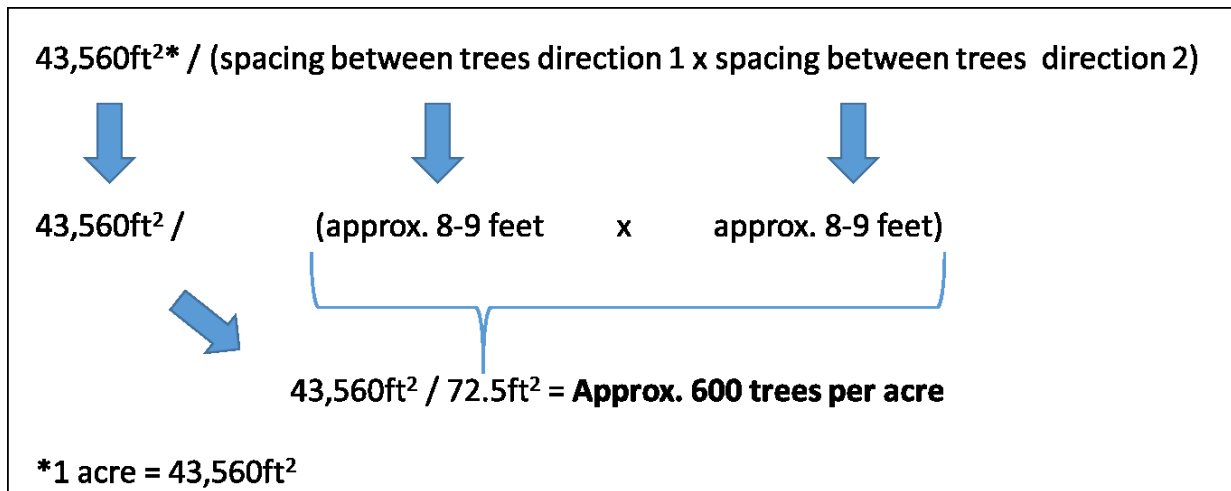


Figure 1: Estimated Number of Trees per Acre

1,000,000 trees / approx. 600 trees per acre = **approx. 1700 total acres required**

Figure 2: Estimated Acres to Plant One (1) Million Trees

The 1700 acres required to plant one (1) million trees in Chatham-Kent exceeds the amount of Municipally-owned land that is suitable for tree planting, which suggests that the Municipality will have to collaborate with private landowners in order to secure enough land to reach the goal of planting one (1) million trees.

#### Tree Planting in New Subdivisions:

Chatham-Kent's Development Standards – approved by Council on June 24<sup>th</sup> 2019, requires that one native Carolinian tree be planted on the public road right of way in the front yard of every new unit constructed in a new residential subdivision. Since the standard was approved, an amount of \$350 per lot has been collected for each new residential lot in new draft approved plans of subdivisions. A reserve has been established and once it is appropriate, trees will be planted in the newly constructed subdivisions.

#### Existing Urban Street Trees

As mentioned above, trees in general provide a number of valuable economic, social, and environmental benefits for the community. All these benefits – such as shade, enhanced aesthetics, outdoor recreation, storm water management, etc., are amplified in urban areas due to the proximity of people that experience these benefits. A study conducted in

Modesto California estimated that the community derived just under \$2 in benefits for every \$1 invested in their urban forestry program<sup>4</sup>.

Urban street trees, for their part, significantly enhance neighbourhood walkability and property values while reducing building energy loads and storm water run off. Older mature street trees are valued highly by the Chatham-Kent community as was evidenced by the feedback received from the public with regards to the proposed Victoria Avenue rehabilitation project.

Recognizing the value of street trees, on May 25 2020, Council approved a motion directing administration to “develop and implement a street tree cover policy, to maintain and encourage tree coverage by continuing active surveillance and maintenance of trees on municipal right of ways, including replacement when required.” In response to this motion, staff are proposing the following elements:

1. Implementing the “avoid harm → minimize harm → replace tree” hierarchy for all future municipally-led public construction works that have the potential to impact municipally-owned street trees. This hierarchy would effectively introduce a no-net-loss policy for Chatham-Kent’s urban street trees and ensure that the Municipality recognize the value of existing street trees during project design. It would also require the Municipality to demonstrate the application of the hierarchy when street trees are impacted due to a municipal project. The specific locations for tree replacements will be determined on project-by-project basis.
2. Completing an urban street tree inventory and condition assessment to capture the following information for each street tree: location, tree species, general health, estimation of the economic value of ecosystem services generated, approximate age etc. The street tree inventory will be completed for all primary and secondary urban centres throughout Chatham-Kent as resources allow. With current resources Public Works estimates it will take approximately 10 years to complete this assessment. Alternatively, it is estimated that to hire an arborist contractor, this work could be completed in 1-2 years with an estimated cost of \$750,000. In the meantime, it is recommended that Council consider having Public Works adopt a cut-a-tree, replace-a-tree program. In order to do so, there would be a financial implication of approximately \$75,000 per year.
3. Integrating the results from the urban street tree inventory into the Municipality’s corporate asset management program. Chatham-Kent’s existing asset management program enhances the Municipality’s ability to manage its many assets (such as buildings, roads and bridges) by informing maintenance and replacement activities and prioritizing the allocation of limited resources. The integration of street trees into municipal asset management programs is an emerging beneficial management

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<sup>4</sup> E. Gregory McPherson , California Trees: Exploring Issues in Urban Forestry 10(3): 5,9. 1999.

practice (BMP)<sup>5</sup>, and doing so will enable Chatham-Kent to extend the same asset management philosophy it currently employs to maintain things like buildings, roads and bridges to the community's urban street trees.

4. Exploring service enhancements to street tree maintenance and replacement programs along with budget implications and reporting back to Council if the tree inventory and condition assessment suggest that such enhancements will benefit the community. The completion of the street tree inventory and condition assessment will provide the information necessary to define the community's street tree enhancement, maintenance and replacement needs along with associated resource requirements. Once completed, staff will analyze the inventory and provide Council with recommendations to enhance Chatham-Kent's urban street tree canopy that are informed by the inventory's findings.

#### Results from Previous Tree Planting and Environmental Stewardship Efforts

The Chatham-Kent Natural Heritage Strategy was developed in 2014 to provide the Municipality with a non-regulatory framework for enhancing the natural environment across the community. The implementation of the strategy has focussed on increasing forest, wetland and native prairie cover in Chatham-Kent through a collaborative approach with willing landowners. As part of the strategy, the Municipality partnered with the Lower Thames Valley Conservation Authority (LTVCA) to deliver the stewardship activities on private lands, which, since 2014 has led to:

- The planting 493,200 trees on 800 acres,
- The creation of 428 acres of Tall Grass Prairie, and
- The creation of 216 acres of wetlands.

While these results demonstrate a significant commitment on the part of participating private landowners to enhance Chatham-Kent's natural environment, the amount of trees and number of acres planted over the past five year period (since 2014) represents approximately half of what the community would need to achieve in order to meet the million tree target over the next four years, which suggests that increased momentum will be required. While significant gains have been made in the planting of new trees and other habitat creation since 2014, it has been until recently too early to gauge the overall success of the Natural Heritage Strategy. However, in 2020, new SWOOP (Southwestern Ontario Ortho Photography) aerial photography was completed for the entire Municipality. It is anticipated that the LTVCA won't receive this data until February 2021. Based on this timeframe, a complete natural heritage cover change analysis between 2010, 2015, and 2020 will be completed in July 2021.

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<sup>55</sup> [https://mnai.ca/media/2019/07/SP\\_MNAI\\_Report-1-\\_June2019-2.pdf](https://mnai.ca/media/2019/07/SP_MNAI_Report-1-_June2019-2.pdf)

### Trees, Tall Grass Prairies and Wetlands

As mentioned in the motion quoted above, “Chatham-Kent has less than six percent natural cover, including trees, wetlands, grassland and pollinator habitat, the lowest percentage for an upper tier municipality in Ontario”. While the motion also speaks to “planting one (1) million trees over four (4) years” in order to increase natural cover in Chatham-Kent the motion also implicitly recognizes the value of wetland and tall grass prairie ecosystems from a habitat, biodiversity and ecosystem services perspective.

### Building the Momentum Required to Plant One (1) Million Trees

As has been discussed above, achieving the goal of planting one (1) million trees over four (4) years will require undertaking stewardship activities on private lands and roughly doubling the amount of stewardship activities presently completed on an annual basis. While the Conservation Partners (e.g. LTVCA, SCRCA) and the Municipality are fully committed to ramping up efforts to achieve this goal, there are a number of elements that are not fully within the control of the Municipality or the Conservation Partners, which may impact the four (4) year timeframe. These include:

- Identifying Private Landowner Participants: Identifying the 1700 acres of land necessary to plant one (1) million trees in Chatham-Kent is dependent on the voluntary participation of numerous willing landowners who are interested in planting trees on their properties. Although the Municipality and its partners will undertake a multi-faceted community awareness, outreach and marketing campaign to promote this initiative to the community, the ability to meet the million tree target is dependent on the voluntary willingness of landowners to participate in the endeavour.
- Tree stock availability: The other factor which may impact the four (4) year timeline is the availability of suitable tree stock for planting. It takes four (4) years on average, depending on the species, to be able to grow a tree seedling from seed. Although tree stock growers integrate this timeframe in their production plans to produce a supply of seedlings each year, they also have to carefully calibrate their tree stock inventories based on anticipated demand in order to limit losses associated with unsold trees to remain profitable. Planting one (1) million trees represents an approximate doubling of current tree planting activities over the four (4) year period. It is anticipated that stock availability will likely be a limiting factor in the first few years as suppliers adjust their planting plans to account for increased demand.

### **Identifying public lands than can be used to support this initiative**

The identification of suitable municipally-owned lands for tree planting is an ongoing initiative that staff have been working on since Council approved the Motion to Plant One (1) Million Trees at the November 4<sup>th</sup> Council meeting. Staff will employ the following process to identify candidate municipal lands for tree planting:

1. GIS-based inventory of Municipally-owned parcels with appropriate land use designations and zoning for tree planting.
2. Remote evaluation of site conditions using aerial photography to screen out parcels whose characteristics make them unsuitable for tree planting.
3. On-site assessment of candidate parcels to ground-truth the aerial evaluation and develop site-specific tree planting and maintenance plans.

### **Identifying best practices from other municipalities on this subject**

In order to prepare this Report, staff have completed a literature review and a scan of Best Management Practices (BMPs) from other municipalities. Key findings from this research are listed below:

Successful reforestation requires a tree maintenance program. Seedlings and young trees are susceptible to a variety of impacts that need to be managed in the first few years following tree planting to prevent mass die-offs. This includes managing faster growing plants such as weeds and tall grasses that can crowd out young seedlings in the first few years and protecting seedlings from large ungulates (such as deer) who tend to eat the buds and bark of younger trees when other sources of food are scarce such as in the winter. Although maintenance programs require dedicated funding, it has been shown that the cost of tree maintenance programs leads to a higher success rate at a lower cost than if trees are replanted at the same spot over several years to replace the trees that have died from lack of maintenance.

Successful reforestation requires the use of a variety of native tree species. Tree species that are native to the area are better adapted to local conditions than non-native trees because they have evolved to thrive in our local climate, and are therefore more likely to take hold during those crucial initial years following planting. In addition, planting a variety of native tree species avoids a mono-culture situation which is much more vulnerable to insect and disease infestations than plantings that feature numerous tree species.

Successful reforestation requires the development of a site-specific planting plan. The development of a site specific tree planting plan is a key component of good reforestation practices because it enables the planting of “the right trees in the right places” by considering site geography and constraints, soil conditions, the appropriate mix of species, good planting locations, and proper tree spacing. Tree planting plans reduce the chance of planting “the right trees in the wrong places” or of planting “the wrong trees in the right places” both of which reduce the likelihood of successfully reforesting an area in the long term.

Successful reforestation programs include measures to conserve existing trees. Within the realm of reforestation, not all trees are equal from an ecosystem perspective. Big, healthy and mature trees produce more shade, provide more habitat, filter more water, sequester more carbon, and provide greater aesthetic value than small seedlings of the same species. This suggests that reforestation efforts would be more effective at enhancing the



natural environment if they also include measures to conserve existing trees on the landscape. In order to reduce mature tree loss, several municipalities in Ontario have enacted tree management bylaws based on the authority granted to them under the Ontario Municipal Act. One of the defining features of tree management bylaws in Ontario is the existence of distinct policy regimes for urban trees vs. rural trees.

In urban areas, tree management bylaws regulate individual trees and determine which trees are subject to regulation based on the diameter of the trunk at breast height (known as DBH) which varies from Municipality to Municipality. For example, the City of Oakville, which has the most restrictive urban tree bylaw in Ontario, requires that landowners obtain a city permit to injure or destroy any tree with a DBH of 15cm or more, whereas the City of London has decided to regulate large mature trees and only requires landowners to obtain permit for injuring or destroying trees with a DBH of 50cm or more. Certain Municipalities, such as Oakville, require that landowners plant replacement trees as a permit condition, and others such as Brampton provide permit exemptions if the tree is located within a certain distance from a building, or if it poses an immediate safety threat to persons or property.

In rural areas tree management bylaws regulate groups of trees (woodlots) and determine which trees are subject to regulation based on the woodlot area. For example, the counties of Lambton and Elgin regulate the injury or destruction of trees in woodlots that are 0.2 hectares or larger whereas Halton Region regulates woodlots that are equal or larger than 0.5 hectares and Middlesex County's bylaw only applies to woodlots greater than 1 hectare. With few notable exceptions (i.e. Halton Region), rural tree bylaws typically allow landowners to harvest trees for personal use without a permit so long a good forestry practices are employed and the trees are not sold for profit. Rural tree bylaws also exempt landowners from obtaining permits when managing trees that encroach on productive agricultural land – such as when seedlings take root in existing crop or grazing areas. Certain rural tree bylaws include additional restrictions and/or require special permits for trees located within environmentally significant areas – such as Elgin County which requires a special slope permit for cutting trees on demarcated slopes which may require a geotechnical assessment to verify that tree removal will not negatively impact the slope area (i.e. increased erosion) and Lambton County which prohibits tree cutting within its demarcated Natural Heritage System.

The Chatham-Kent Official Plan does contain policies requiring Environmental Impact Statements (EIS) for Significant Woodlands (i.e. woodlands 2 hectares in size or larger) and that site alteration will not be permitted unless an EIS demonstrates no negative impacts on the natural heritage features or ecological functions when development is proposed. Therefore, when there is a planning application involved, there is a trigger with which the Municipality can require an EIS (if necessary) and/or impose certain conditions through the planning approval. When there is no planning approval required, there is no trigger. There currently is no regulatory framework that establishes specific regulations, fines, penalties, etc. for tree removal or site alteration as the Municipality of Chatham-Kent is one of the few remaining municipalities that does not currently have a regulatory tree management by-law or site alteration by-law of some type.

It should be noted that whether urban or rural, tree management bylaws in Ontario have been designed to manage, and to reduce, but not prohibit, the injury or destruction of trees in a community; therefore, the Municipality would like to further examine their true effectiveness in protecting trees. In addition, there are resource considerations that must be taken into account for the administration and enforcement of any regulatory approach.

An overview of selected Tree Management bylaws from Ontario Municipalities is provided below.

Examples of tree bylaws from other municipalities:

Middlesex County:

Tree Stand Size	Approval Authority	Fee
Greater than 1 Hectare	Council	\$100
<b>Additional Restrictions?</b>	N/A	
<b>Exemption?</b>	personal use – no specified limit	

Elgin County:

Tree Stand Size	Approval Authority	Fee
0.2 Hectares – 1 Hectare	Town Clerk	\$200
Greater than 1 Hectare	Council	\$200
<b>Additional Restrictions?</b>	A special “Slope Permit” is required for cutting trees on demarcated slopes. May require geotechnical report to confirm slope stability prior to cutting.	
<b>Exemption?</b>	20 Trees per year for personal use.	

Lambton County:

Tree Stand Size	Approval Authority 1	Approval Authority 2	Fee
0.2 Hectares – 1 Hectare		Council – if public objection received	\$1000

Greater than 1 Hectare	Town Clerk – if no public objection received		
<b>Additional Restrictions?</b>	Restrictions against cutting within Sensitive Natural Areas – requires Council approval and may require ecological impact assessment.  Prohibition against cutting within Natural Heritage System Corridors – areas are zoned <i>Priority Protection</i>		
<b>Exemptions</b>	Personal use* – no specified limit  *must own land for 2 years prior to first harvest		

#### Halton Region:

Tree Stand Size	Activity	Approval Authority	Fee
Greater than 0.5 Hectares	Selective Harvest	On staff arborist	n/a
	Clear cut	Council	\$500

#### **Identifying ways to incentivize land owners to plant and maintain tree cover and other natural habitat**

Alternative Land Use Services Program (ALUS): ALUS Canada in partnership with the Lower Thames Valley Conservation Authority (LTVCA) introduced the Alternative Land Use Services Program in Chatham-Kent in November of 2018 to enhance existing stewardship programming for privately-owned lands. The ALUS program is a voluntary, non-regulatory and incentive-based approach to environmental stewardship specifically focused on marginal and environmentally significant lands that are part of the productive agricultural landscape. Through the program, landowners are able to co-design their stewardship projects with the LTVCA, and once approved are provided with some funding to help establish the project. Common ALUS projects include native prairies, wetland restoration and reforestation. Once the project is established, landowners are provided with an annual payment for the acres included in the stewardship project to recognize the value of the ecosystem services generated by the project and to incentivise the long term retention of the project.

The voluntary, collaborative and incentive-based nature of the ALUS program renders it particularly appropriate for assisting with the identification of willing landowners with

suitable locations for planting trees on private properties, which, as mentioned above will be required to achieve the million tree target.

Managed Forest Tax Incentive Program (MFTIP): The MFTIP program is managed by the Ontario Ministry of Natural Resources and Forestry (MNRF) and is designed to bring greater fairness to the property tax system by valuing forestland according to its current use<sup>6</sup>. Under the program, qualifying landowners are able to get their woodlots classified and assessed as managed forest under the Managed Forest property class which is taxed at 25 percent of the municipal tax rate set for residential properties. In order to qualify for the MFTIP landowners must:

- Own at least four (4) hectares (9.88 acres) of forested property.
- Prepare an approved Managed Forest Plan.
- Carry out activities in the woodlot in accordance with “good forestry practices” as defined by the Ontario Forestry Act.

Conservation Land Tax Incentive Program (CLTIP) – The CLTIP program is managed by the Ministry of Natural Resources and Forestry and is designed to provide landowners with a 100% property tax exemption for portions of a property that feature one or more of the following land types:

- a) Provincially significant areas of natural and scientific interest.
- b) Niagara Escarpment Natural Areas within the designation “Escarpment Natural Area”.
- c) Habitats of endangered species.
- d) Provincially significant wetlands approved by MNRF.
- e) Community Conservation Lands (restricted to non-profit charitable conservation organizations and conservation authorities).

In addition to the above, the land needs to be a half acre or larger. Floodplains are not eligible land types.

Farm Forestry Exemption – The Municipal Property Assessment Corporation (MPAC) administers this program in conjunction with a property owner’s land assessment under Section 3(19) of the Assessment Act. In this program, one acre used for forestry purposes for every ten acres of farmland in any one municipality under a single ownership, but not more than 20 acres in all, is exempt from assessment, and subsequently property taxes. There is no property tax charged on the woodlot as long as it is a qualifying farm property and the total woodlot under a single ownership does not exceed 20 acres in a given municipality. To be eligible, the land must not be subject to the Managed Forest Tax Incentive Program or the Conservation Land Tax Incentive Program.

By lowering the property tax burden of forested areas, the MFTIP, CLTIP and Farm Forestry Exemption programs seek to incentivise the retention of larger forested areas on the landscape and can be employed to support the million tree target. Additional information about the

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<sup>6</sup> <https://www.ontariowoodlot.com/forest-management/mftip/mftip-program>

MFTIP, CLTIP or Farm Forestry Exemption programs can be found in the [Woodlot Property Tax Programs Report](#) to Council that was included in the November 18<sup>th</sup> 2019 Council Agenda.

### Professional Forester

In 2014 Council approved a one-time expenditure to an upset limit of \$70,000 to contract a Registered Professional Forester. Rendered services include woodlot assessments, promotions and educational activities related to Chatham-Kent forest conservation activities.

Woodlot assessments are necessary to develop a Managed Forest Plan – a requirement for a MFTIP application. Since 2014 the retained Registered Forester has completed 53 woodlot assessments and numerous classes on forest ecology with the Lambton Kent District School Board.

### **Identifying potential community partners who can help the municipality achieve its goal**

#### Ridge Landfill Community Trust facilitated by Waste Connections of Canada Donation

On November 21<sup>st</sup> 2019, the Ridge Landfill Community Trust facilitated by Waste Connections of Canada announced a donation of \$1 million to the Lower Thames Valley Conservation Authority to fund stewardship activities such as tree planting across South Kent. Donating the funds to the LTVCA will enable the Conservation Authority to do two things: firstly, the LTVCA is expecting to leverage the \$1 million donation to secure additional sources of external funding at a 3:1 ratio, meaning that the \$1 million would turn into a total of \$3 million of stewardship funding for South Kent. Secondly, by dedicating this donation to South Kent, the LTVCA will be able to reallocate stewardship funding that was planned for the South Kent area to other areas in Chatham-Kent which will increase the amount of funding available for stewardship activities across the entire Municipality.

The generous financial support that the Ridge Landfill Community Trust has made will provide the community with a significant portion, if not the majority of the funding required to meet the goal of planting and maintaining one (1) million trees.

#### Carolinian Canada's In the Zone Program

Carolinian Canada is a registered not-for-profit organization that has been advancing a collaborative strategy for healthy ecosystems in Canada's Carolinian ecoregion since 1984. In 2019, Carolinian Canada launched a campaign to grow Canada's biggest wildlife garden through the "In the Zone" program in partnership with World Wildlife Fund-Canada. The campaign and program aim to encourage and support landowners to plant native Carolinian species throughout the entire Carolinian ecoregion, of which Chatham-Kent is a part of. The program provides landowners with free gardening resources to guide participants through subjects such as native plant selection, planting techniques, how to create climate-smart wildlife habitat and connects gardeners to local native plant growers. The program also features the "In the Zone Tracker" online tool that allows individuals to

record their own individual stewardship activities. The data is used to evaluate and communicate the collective impact of native plantings across the ecoregion. Finally, the program provides users with access to a network of peers to share knowledge, experience, tips and stories.

In the fall of 2019, municipal staff partnered with Carolinian Canada to host a series of workshops on November 28<sup>th</sup> 2019 to launch the In the Zone Program in Chatham-Kent. The workshops were attended by approximately 60 community members and featured information about the various components of the In the Zone Program. For more information about the In the Zone Program please visit: <https://inthezonegardens.ca>

### Ontario NativeScape

Ontario NativeScape (ONS) is a not-for-profit organization that specializes in managing and completing habitat restoration projects that achieve and maintain a healthy and sustainable environment. Focused on restoring and safeguarding Ontario's native ecosystems and biodiversity, ONS have 25 years of experience planning, implementing and managing habitat and water quality restoration projects on both private and public lands. As leaders in tallgrass prairie restoration to date ONS have managed and restored over 1600 hectares of tallgrass prairie habitat in Ontario.

Since 2015, ONS partnered with ALUS Canada and facilitates the nationally recognized Alternative Land Use Service (ALUS) program in Lambton County. ALUS invests in farmers who are producing acres of clean air, clean water, wildlife habitat and other ecosystem services in communities across Canada.

Based in Chatham-Kent, ONS is a well-established environmental organization that continues to build an extensive network of partnerships towards habitat restoration and look forward to contributing to the CK Million Trees Initiative.

### St. Clair Region Conservation Authority

Approximately 750 km<sup>2</sup> of north Chatham-Kent lies within the St. Clair Region Conservation Authority's watershed basin. SCRCA's Healthy Watersheds Program is an initiative that provides technical and financial assistance to improve and protect rural water quality by implementing a number of Best Management Practices (BMPs) on the landscape. The Healthy Watersheds Program actively seeks granting programs that will bring financial support into the SCRCA region to aid the conservation efforts of landowners in the region. Over the last decade, the Conservation Authority has distributed more than \$1,750,000 in grants to landowners, which has resulted in over 500 stewardship projects at an estimated value of \$5.75 million. The projects include such Best Management Practices (BMPs) as streambank stabilization, tree planting, wetland creation, livestock fencing from watercourses, and erosion control, all of which help to mitigate the effects of sedimentation, nutrient loading and thermal changes in the SCRCA watershed. These projects have been targeted to particularly benefit water quality in the Sydenham River and its tributaries in order to improve aquatic habitat for species at risk. Since 1980, over 3.8 million trees have been planted throughout the SCRCA region on public and private lands through the Conservation Authority's Stewardship program.

SCRCA employs several staff with backgrounds in forestry as well as many years of experience with tree planting projects in southern Ontario. SCRCA's tree planting program is very comprehensive and includes things ranging from collecting local tree seed that is used to grow tree seedlings to be planted back into their place of origin to ensure high tree survival and vitality, as well as offering a long term vegetation control program for three (3) years after planting in order to give trees a much better opportunity for success.

### Sydenham Field Naturalists

Sydenham Field Naturalists (SFN) is a registered, non-profit organization whose members aim to enjoy, as well as preserve wildlife and natural history, primarily in the Chatham-Kent area. SFN's mandate is to encourage and promote activities that would lead to the appreciation, preservation and conservation of our natural heritage, provide the opportunity for nature interested people to gather and share experiences together, provide financial support to partner groups and SFN club projects, promote and explore the natural areas of our local region and to provide a reliable source of information regarding nature related topics.

The club is involved in a variety of projects including prairie restoration, native tree planting and conservation efforts to preserve significant natural areas in the region. SFN have an active partnership with St. Clair Conservation Authority involving our stewardship of Peers Wetland and its management of the wetland and prairie. SFN has partnered with and has a continuing working relationship with the Municipality of Chatham-Kent with stewarding and restoration work in Wallaceburg Sycamore Woods, Wallaceburg Paw Paw Woods and projects such as Tall Grass Prairie Demonstration Garden at Mud Creek and prairie planting on the buffer of Running Creek at Crothers Park. SFN are currently offering our assistance in the future prairie planting at the rear of the Municipal Civic Centre in Chatham.

### Rotary Clubs (Imagine McGregor project)

Rotary Club of Chatham Sunrise, the Municipality of Chatham-Kent and the Lower Thames Valley Conservation Authority are developing the "Imagine McGregor Creek" program. Partnerships are being created and landowners are being contacted to look at community projects. Undertaking of restoration projects is slated to start in the spring of 2020.

The Stream restoration work envisioned by the "Imagine McGregor Creek" program will begin with but not be limited to invasive species control, stream clean ups, bank stabilization, riparian plantings, and barrier removal (such as projects to help migrating fish pass through culverts). Beautifying the creek will provide more and enriched opportunities for the community to engage with McGregor Creek.

### Tomorrow's Greener Schools Today

The Lower Thames Valley Conservation Authority, in partnership with CK Public Health launched the Tomorrow's Greener Schools Today program in 2013, a multi-component education and communication schoolyard tree planting initiative that encourages sun

protective behaviors in schools. Each year the partners collaborate with several local elementary and secondary schools to involve students in school yard tree planting activities and to provide information on the health and environmental benefits of trees. To date over 600 mature trees have been planted at approximately 35 schools.

### **Areas of Strategic Focus and Critical Success Factors**

The recommendations in this report support the following areas of strategic focus:

- Economic Prosperity:  
Chatham-Kent is an innovative and thriving community with a diversified economy
- A Healthy and Safe Community:  
Chatham-Kent is a healthy and safe community with sustainable population growth
- People and Culture:  
Chatham-Kent is recognized as a culturally vibrant, dynamic, and creative community
- Environmental Sustainability:  
Chatham-Kent is a community that is environmentally sustainable and promotes stewardship of our natural resources

The recommendations in this report support the following critical success factors:

- Financial Sustainability:  
The Corporation of the Municipality of Chatham-Kent is financially sustainable
- Open, Transparent and Effective Governance:  
The Corporation of the Municipality of Chatham-Kent is open, transparent and effectively governed with efficient and bold, visionary leadership
- Has the potential to support all areas of strategic focus & critical success factors
- Neutral issues (does not support negatively or positively)

### **Consultation**

Finance, Budget & Information Technology was consulted in the development of this report. In addition, the following organizations were also consulted:

- LTVCA
- SCRCA
- Carolinian Canada
- Ontario NativeScape
- Sydenham Field Naturalists



**Financial Implications**

The street tree inventory will be completed for all primary and secondary urban centres throughout Chatham-Kent as resources allow. With current resources, Public Works estimates it will take approximately 10 years to complete this assessment. Alternatively, it is estimated that to hire an arborist contractor, this work could be completed in 1-2 years with an estimated cost of \$750,000. In the meantime, it is recommended that Council consider having Public Works adopt a cut-a-tree, replace-a-tree program. In order to do so, there would be a financial implication of approximately \$75,000 per year to be considered during the 2021 budget deliberations.

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Attachment: None

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