

Tree By-law Review Discussion Paper June 2019

BACKGROUND

The City of Ottawa is undertaking a review of its tree by-laws, policies, and processes involved in implementing them. This paper summarizes the Tree By-law Review project and the challenges that stakeholders have identified with the current tree by-laws. It outlines a suite of proposed directions to improve the by-laws and associated processes.

We need your input! This discussion paper has been prepared to support consultations with stakeholders. A companion slide deck is also available, which summarizes the information contained in this paper.

Existing Legislation and Policy

The Ontario Municipal Act gives municipalities in Ontario the ability to enact by-laws to prohibit or regulate the destruction or injuring of trees. The City of Ottawa currently has two tree by-laws; the Municipal Trees and Natural Areas Protection By-law, 2006-279 and the Urban Tree Conservation By-law, 2009-200.

The Municipal Trees and Natural Areas Protection By-law, 2006-279 (MTNAPB) protects all trees on City-owned land, city wide. This includes trees within parks, road right-of-ways, City properties, and natural areas. Permission from the City of Ottawa's Forestry group is required prior to removing a City-owned tree.

The Urban Tree Conservation By-law, 2009-200 (UTCB) applies to privately owned trees within Ottawa's urban area, as defined by [Schedule "B", Urban Policy Plan](#), of the City's Official Plan. The regulations vary depending on the property size. For properties greater than one hectare in size, a tree permit is required to remove any tree 10 cm in diameter at breast height (DBH)¹ or greater. For properties one hectare or less in size, a tree permit is required to remove any distinctive tree, which are trees 50 cm DBH or greater.

Both City tree by-laws have had minor amendments over time, but neither have had a comprehensive review since their inception.

When the UTCB was approved in 2009, it was addressing the urban tree issues of the day and now the urban tree canopy is facing new and different challenges. During the

¹ Diameter at breast height or DBH means the measurement of the trunk of a tree at a height of 1.2 metres above ground level. Find guidance on how to measure a tree [here](#).

consultation process for the City's Urban Forest Management Plan (UFMP), many issues were identified regarding the effectiveness of the "distinctive tree" component of the UTCB. Key stakeholders and City Councillors had also been asking for this comprehensive review over time. As such, a key recommendation of the UFMP was to review and update the City's tree by-laws. The MTNAPB has been working well and this review presents an opportunity for City staff to make further improvements.

PROJECT DESCRIPTION

The City's tree by-laws are the key regulatory tools that enable the City to protect trees. An integrated approach to regulating tree removals in Ottawa will help to realize the vision of the UFMP; to achieve a sustainable and resilient urban forest.

The objective of the Tree By-law Review project is:

To develop an integrated approach to protect Ottawa's urban tree canopy while maintaining and increasing the diversity of the urban forest over time by revising the City's tree by-laws and the associated processes, as well as developing transparent tree permitting and compensation requirements.

The project is centered around three goals; to **RETAIN – REPLACE – RENEW** Ottawa's urban forest. The first goal is to **retain** trees on a site. Trees that cannot be retained will be **replaced** to ensure that the tree canopy will be reinstated over time. All the while actively planting new trees to **renew** the urban tree canopy.

The integrated approach is supported by the objectives and principles of the Council-approved UFMP. As per the UFMP, the Tree By-law Review project will include the following elements:

- Review and update the UTCB and the MTNAPB
- Investigate the need for a heritage tree protection by-law, program, or registry in Ottawa
- Develop city-wide tree compensation guidelines
- Identify and formalize incentives to encourage tree conservation and tree planting
- Revise policies and processes related to tree protection and the implementation of the City's tree by-laws
- Recommend changes to the Official Plan to ensure strong policies in support of the urban forest
- Consider options for the protection of peri-urban woodlands²

² Peri-urban woodlands are rural woodlands adjacent to the urban boundary.

The project will also examine the need for additional resources to implement any recommended changes to the tree by-laws and associated processes.

More information on the UFMP can be found at www.ottawa.ca/urbanforest.

More information on the Tree By-law Review project can be found at www.ottawa.ca/treebylawreview.

FRAMING THE KEY CHALLENGES

A series of key challenges with the existing tree by-laws and their implementation processes have been identified through stakeholder consultations and are summarized below.

1. Tree Loss in Inner Urban Neighbourhoods

A loss of tree cover has been observed in Ottawa's inner urban neighbourhoods. The cumulative impact of tree loss over time has become apparent. In partnership with Carleton University, City staff conducted a study to measure tree loss between 2008 (the year before the UTCB came into effect) and 2017 in five urban neighbourhoods. In each neighbourhood, 500 randomly selected points were sampled for tree cover in 2008 and in 2017. Over the nine-year period, between 30% and 58% of the trees sampled in 2008 were lost and not replaced. Independent resampling of Wellington Village and Westboro showed declines in urban canopy cover from 50% to 29% and 51% to 30% respectively (95% confidence interval of +/- 4% for all estimates). Based on visible land use changes, it appeared that new construction accounted for between 22% to 46% of tree removals across the study neighbourhoods. The causes of the remaining losses could not be identified, but would include natural mortality, wind damage, and emerald ash borer. These results indicate a high rate of tree loss despite the enactment of the UTCB.

Sustained tree loss and lack of replacement are not consistent with Official Plan objectives or the vision and principles of the City's UFMP. As such, the loss of trees in the inner urban area is one of the key issues to be resolved through the Tree By-law Review project.

- Staff have observed, anecdotally, that the average age of the tree canopy in several downtown neighbourhoods is old. As a result, many trees in these residential neighbourhoods will be nearing the end of their lifecycle.
- It has proven difficult to protect very large trees (50+ cm DBH) adequately during infill development because of their large critical root zones, small property sizes, and large zones of excavation.

- Staff and stakeholders have identified opportunities to improve the intake process for tree permits, administered through building permits and planning applications. There is recognition that trees are being considered too late in the processes, after building plans have been finalized, making it difficult for staff to influence decisions about trees.

2. Education is Needed

Stakeholders believe that education is necessary to raise public awareness about the environmental, social and economic benefits of trees in urban areas. Builders, developers and trades people must also be educated about tree retention and protection, to ensure that trees are treated as valuable City assets. Staff reviewing planning applications must be educated about the importance of trees; they must also feel empowered to influence applicants to retain, replace and renew the urban forest. To maintain our current canopy cover and grow it into the future, decisions will have to be made to retain and adequately protect both private and City-owned trees and the issuance of tree permits will have to be carefully considered.

3. Implementation Processes

It has become apparent that trees are being considered too late in the planning and building processes. This makes it difficult to retain existing trees and ensure that they are protected adequately during construction.

City-owned trees are being removed to support private developments and for City infrastructure projects; often they are not considered in the initial stages of the design process, before project plans are finalized. Similarly, privately owned trees are faced with the same challenges due to infill development.

Trees are not currently considered by applicants submitting proposals to sever lands or vary the zoning by-law through the Committee of Adjustment. Given the significant uptake in infill and renovation projects, staff believe there is an opportunity to support and enhance the urban forest through these planning processes.

In building permit scenarios, the consideration for trees is not integrated into the process to issue the building permits because tree by-laws are not considered applicable law under the province's Building Code Act. As a result, the building permit is issued under one process and the tree permit is issued under another process. Once a building permit is issued, it is difficult for City Forestry staff to deny a tree permit.

4. Inadequate Tree Protection

City staff and stakeholders have noticed for many years now that, in development scenarios and for infrastructure projects, adequate tree protection measures are often not being used. Both of the City's tree by-laws and website include details around how

to protect a tree. However, in practice, staff are often not seeing adequate protection measures in place for the full duration of a construction project. The result is that trees that were meant to be retained are getting damaged. Too often, these trees die from the damage they sustain during construction or they become dangerous and must be removed.

The standard tree protection requirement is to erect a fence around the critical root zone (CRZ) of the tree. The CRZ is within 10 cm of the trunk of a tree for every 1 cm of trunk diameter. In certain situations, it is possible to infringe on the CRZ without harming the tree. Historically, the City has not provided guidance on how to safely work close to, or within, the CRZ of trees to be retained.

In some cases, trees that are jointly owned between two neighbours or trees that are on properties adjacent to a property where construction is occurring are damaged because of inadequate tree protection. These situations can become civil disputes between neighbours. Clarity around making considerations for jointly owned trees and adjacently owned trees could be helpful.

5. Protection of Heritage Trees

The UFMP recommended an investigation of the need for a heritage tree by-law, program, or registry for Ottawa. This recommendation stemmed from stakeholder's concern around the lack of identification and subsequent long-term retention and protection of heritage trees in Ottawa.

In Ottawa, the UTCB currently aims to protect distinctive trees, which are large sized trees, on properties less than one hectare in size, which could be a way to protect "heritage trees" in Ottawa, if the local definition of heritage was size-based. However, as a standalone tool, the UTCB hasn't been overly successful in protecting distinctive trees.

Generally, trees that are designated as heritage trees within tree by-laws have a higher level of protection; they can only be removed if authorized by City Council.

6. Protection of Peri-urban woodlands

When the City's Planning Committee of Council considered and approved the Site Alteration By-law in February 2018, concern was raised regarding the protection of rural woodlands located adjacent to the urban boundary. These peri-urban woodlands are not covered by the UTCB because they are not within the urban area. The cause for concern is that these woodlands may be cleared in anticipation of future growth potential, even though they may not be designated in the Official Plan for these purposes. City staff were directed to consider the protection of peri-urban woodlands as a part of this project.

This discussion was raised when the UTCB came into effect 10 years ago and at the time it was decided to apply the provisions of the by-law to one parcel of rural land adjacent to the urban area in the east end of the City that was thought to be a candidate for urban expansion. Then, when Council approved the last set of urban expansion areas, the UTCB was amended to apply the provisions of the by-law to all of the approved urban expansion areas, at that time. Some stakeholders believe regulations on tree removal are required in all areas that could be perceived as suitable for future urban growth.

PROPOSED DIRECTIONS

Based on the numerous issues identified with the current tree by-laws and associated implementation processes, City staff have been working to develop a suite of proposed recommendations to address the key challenges identified. Building awareness about the value of the urban tree canopy, thus shifting attitudes around urban trees will be fundamental to the success of any revised tree by-laws and their implementation processes. The value of urban trees must be recognized and there needs to be a broad understanding around the impact of a continuing cumulative loss of urban tree cover. Appendix A includes a summary of relevant tree by-law information for other Ontario municipalities.

Create a Single Tree By-law

To streamline the regulations, processes, and requirements, staff recommend that the City's two tree by-laws be combined into one.

Strengthen Official Plan policies

Although the City's Official Plan has policies to support trees, staff recommend that they be strengthened to better reflect the value of the urban forest and support the principles and objectives of the UFMP. Recommended changes include:

- Clear language around the intersection of trees and intensification.
- Direction for early consideration of trees in development and infrastructure projects and guidance on tree issues for City staff and the Committee of Adjustment.
- Clear canopy cover goals that inform related policies throughout the Plan.
- Recognizing the urban forest as green infrastructure and a valued asset and to be considered as such in planning and development decisions.

Lower the Distinctive tree size in the UTCB

Consideration is being made to decrease the size of distinctive trees in the UTCB – that is, the size of trees requiring permits on private properties one hectare or less in size. The current permit trigger of 50 cm DBH or larger is high when compared to other

Ontario municipalities – see Appendix A. It has proven difficult to protect very large sized trees in infill development scenarios. A smaller diameter tree has a smaller CRZ, which makes it easier to protect on smaller development sites. Smaller trees are younger trees, which are more tolerant of some disruption to their root zone than larger sized, older trees.

A sustainable and resilient urban forest must be diverse in terms of its tree species and tree size or age-class structure. As such, retention should be focused on a wider variety of tree sizes rather than just very large trees.

The proposed decrease in diameter could be applied to the urban area inside the greenbelt. The existing distinctive tree provisions of the UTCB could continue to be applied outside of the greenbelt.

A decrease in the diameter for the Distinctive tree portion of the UTCB will result in an increase in tree permits, leading to a requirement for more staff to review and process them.

Earlier Consideration of Trees in the Development Process

Trees must be considered by applicants and staff early on, before building and development plans are finalized, whether that be a Plan of Subdivision, Site Plan, infrastructure project, an application to the Committee of Adjustment, or building permit application. To create opportunities for tree retention in development projects, the integration of the tree protection requirements with site design, grading, servicing, and engineering plans is fundamental to successful tree retention. Some suggestions that stakeholders have identified to ensure that trees are considered earlier include:

- Discuss and determine tree retention opportunities and requirements at pre-consultation meetings for Zoning Amendment, Site Plan and Plan of Subdivision applications.
- Since tree permit information is collected with the building permit, it will be important to ensure better integration of the requirements with Building Code Services. This will include clear direction on the City's building permit website, in brochures, and for building code counter staff on:
 - How the City's tree by-laws apply and the tree-related submission requirements.
 - Considering trees early in the design process, before applicants invest time and money on building and site plans.
 - Highlighting to applicants that tree permits are required in addition to building permits and that the issuance of a building permit does guarantee tree permit issuance.

- Applicants consulting with City Forestry staff on tree retention opportunities and tree protection requirements prior to submitting a building permit application.
- Improve internal process for reviewing Tree Disclosure information submitted with building permit applications.
- Require that Tree Disclosure information be submitted with Committee of Adjustment applications so that the impact of committee decisions on trees is apparent and can be considered.
- Create standard conditions that would apply to Committee of Adjustment decisions on sites where trees have been identified to be retained and protected.
- Implement a pilot program for a “Site Plan Lite” process for infill developments in one or two neighbourhoods of the inner urban area that have experienced significant tree loss, similar to the Sandy Hill Special Site Plan Control Area. Using powers under the Planning Act would provide staff with more authority to consider tree retention, replacement and renewal, allowing for a more integrated design approach.
- Require tree information to be submitted for re-zoning applications, so that the impact of zoning decisions on trees is clear and can be considered through the approval process.

Develop Clear Rules around Tree Permitting

Clear requirements for the submission of tree permit applications and clear rules for when tree permits will generally be issued is considered necessary to help all parties (residents, developers, and City staff) better understand how the process works. This kind of clarity and transparency will also help to educate everyone on tree retention opportunities and manage expectations around tree removals.

Elements to be considered include:

- Revisions to the requirements for Tree Conservation Reports, Tree Disclosure Information, and Arborist Reports. Look at streamlining these various reports.
- A diagram that shows scenarios of where tree permits will generally be issued. This could show notions such as; City owned trees must be retained, trees within the as-of-right building envelope would be granted permits for removal, trees in rear yards would generally require retention depending on their size, condition, species. This would be made available on the City’s website, at the Building Permit counter, and at Client Service Centres.
- Specific rules for intensification versus infill developments that are not creating more units. For example, since intensification is an important objective of the City, there could be more flexibility on tree removals for developments that are creating more units. However, tree planting and tree compensation requirements would still be required. Conversely, new developments that result in a larger detached house

being built in place of an existing detached house would have to take a 'design with trees' approach to their development and show minimal impact to the existing tree canopy through their design.

- Develop flow charts for tree retention and tree permit decision making. Flow charts could be created for both City-owned trees and private trees. Various development scenarios could be considered. These flow charts would be publicly available on the City's website, at the Building Permit counter, and at Client Service Centres.
- More clarity on requirements for removal of / damage to jointly owned trees and trees that are on adjacent properties.
- An appeal process for tree permits. This is something that other Ontario municipalities have in place. For example, in Toronto, appeals are considered by a Citizen's Committee of Council, then move forward to Council for final approval. An Ottawa-specific approach would have to be determined.

Requirement for Permit to Work around Trees

In situations where no trees are being removed on a development site, there is no requirement for the applicant to acquire a tree permit. This means that there is no way for the City to have any input on the tree protection measures to be used for the trees that are being retained. If trees are being retained, it is imperative that they be protected adequately.

For trees that are covered by the City's tree by-laws, a new permit to work around trees would help ensure that there is a clear set of site-specific tree protection standards that are enforceable through the tree by-law. The submission requirements for this new type of permit would be similar to what is already required for an infill development. The required Tree Disclosure Information would include the Arborist's/Forester's recommendations for site specific tree protection. The permit to work around trees would include specific conditions based on the approved Tree Disclosure.

This concept could be piloted inside the Greenbelt then assessed before implemented city-wide.

Improve Information on Tree Protection

Clearer and more readily available information on tree protection requirements and working around trees is necessary.

City staff have recently created and are now distributing a Tree Protection Specification that outlines tree protection requirements from the City's tree by-laws. The spec includes an illustration of what the protection measures should look like and the types of fencing / hoarding to be used. It also includes direction on what to do if infringement on the critical root zone is required. Moving forward, both City tree by-laws should include this kind of specification and direction for tree protection. The City's website should also include a tree protection page with more detailed information and direction.

Develop Tree Compensation Requirements

City Forestry staff currently obtain compensation for the removal of City-owned trees in new development scenarios and for City infrastructure projects. There is an internal process to determine compensation value and the process for collecting the compensation amount. In some cases, in addition to the compensation value, there is also a requirement to plant trees to replace the trees removed. The compensation value is determined using the International Society of Arboriculture's Trunk Value formula. This compensation process for City-owned trees needs to be made more transparent. It should be referenced in the municipal tree by-law and available on the City's website.

There is currently no requirement for compensation for the removal of private trees covered by the UTCB. As per the recommendations of the UFMP, compensation requirements need to be created for private trees, as well. These should include both monetary compensation and replacement tree planting. They should be referenced in the UTCB and made available on the City's website.

The compensation valuation method for private trees could be the same as that used for city-owned trees, or it could take a simpler form whereby monetary values are assigned to different tree size ranges. A simpler approach would be easier to implement.

A tree replacement approach to compensation could involve ratios for replacement requirements. For example, for each tree removed 2 trees must be planted. A higher replacement ratio would contribute to the renewal goals of this project.

Transparent tree compensation requirements will help all players understand what will be required when trees are removed. It will give clear guidance to developers and surrounding neighbours when trees must be removed for intensification projects.

Tree compensation may also act as a disincentive to removing trees.

Develop a Heritage Tree Program

As a starting point, the term "heritage tree" would need to be defined for Ottawa. The various Ontario municipalities that have heritage trees included within their tree by-laws have defined "heritage" differently. Some equate heritage status to large diameter trees, while some have a specific definition based on species, size, or location. Toronto uses trees designated under the Ontario Heritage Act and those recognized by the Forests Ontario's Heritage Tree Program.

For Ottawa, a heritage tree component could be added to the City's tree by-law. A listing of heritage trees could be built over time by City staff and/or in coordination with community groups. Another option is to develop a heritage tree program and registry and to use it as a public education tool around the value of unique urban trees. This would not afford the same levels of protection as a heritage tree by-law would.

An Ottawa-specific approach must be developed.

Education and Training

A key component to the implementation of any tree by-law and process changes will be education and training.

This will involve specific training and a plan for ongoing education for City staff. It will be catered specifically to each of the many groups across the corporation who are involved in work that could impact trees.

A broad education campaign will be rolled out upon Council approval of any changes to the tree by-law and its processes. This will be done using the City's web site, social media, Councillor newsletters, and staff attendance at community group meetings, among other things.

It will also be imperative to do directed sessions with various groups external to the City who will be key to the implementation of any changes. For example: the development community, the construction community, Arborists, Foresters, Landscape Architects, Planners, Engineers, tree companies, etc.

The recommendations resulting from this project will not be successful without a fulsome and well-planned education and training program.

Monitoring and Reporting

The City has not had a robust monitoring system to date for either of the tree by-laws. As part of this project, monitoring measures will be put in place. This will help City staff assess the efficacy of the new tree by-law over time. Linked to the monitoring system will be a transparent reporting framework on the implementation of the City's tree by-law.

NEXT STEPS – WE NEED YOUR INPUT!

We need your feedback and ideas. Do you have ideas for other solutions?

Please submit any written submissions to martha.copestake@ottawa.ca by September 9th, 2019.

This information will be available online in a summarized form for public consultation over the summer at www.ottawa.ca/treebylawreview.

Appendix A: Tree By-laws in other Ontario Municipalities - Precedent Review

City	Tree By-laws and Diameter	Permits	Fees	Public Notice	Timelines and Appeal Process	Compensation Rates and Replanting Ratios	Procedures, Processes and Policies	Incentives to Retain, Protect and Replant	Comments
1 Toronto	<ul style="list-style-type: none"> By-laws to regulate removal and injury Protects all city owned trees Protects trees with diameter of 30 cm or greater on private property 	Permit to injure or remove tree	<ul style="list-style-type: none"> Remove private tree construction/non-construction: \$351/\$117 Remove public tree construction/non-construction: \$351/\$351 Remove boundary or neighbour's tree construction/non-construction: \$736/\$245.35 	<ul style="list-style-type: none"> Notice of application to destroy tree posted on property for 14 days Staff notify neighbours of application when boundary tree is involved 	<ul style="list-style-type: none"> Applications take up to 30 days to review If urban forestry denies permit it can be appealed to City Council through Community Council 	<ul style="list-style-type: none"> City trees: Applicant pays appraised value of tree. For city projects replanting ratio is 3:1. Private trees: 1:1 ratio for non-development related tree loss and 1:3 replanting ratio for development-related tree loss Park trees: appraised value of tree plus 1:1 replanting ratio 	<ul style="list-style-type: none"> Many studies and plans required in support of an application to destroy or injure a tree Tree Protection Policy and Construction Specifications Tree appraisal procedure Clear rules about when a permit is issued versus denied Process to deal with committee of adjustment requests Urban Forestry approves landscape/replanting plan prior to permit issuance City of Toronto Act, Official plan policies, Strategic Forest Management Plan, Ravine Strategy and Shade Tree Policy support urban forestry. Tree canopy target - 40% in next 50 years 	<ul style="list-style-type: none"> Guarantees to protect retained trees Security deposit for tree planting equal to cost of maintenance/planting over 2 years For city trees security deposit based on value of appraisal Replacement trees must be 50mm or greater Cash-in-lieu where replacement is not feasible, \$583 per tree 	<ul style="list-style-type: none"> Ability to comment effectively through committee of adjustment process provides best opportunity to protect trees during development Trees must be considered early in the development process
2 Markham	<ul style="list-style-type: none"> By-law to regulate or prohibit injury or destruction of trees Protects any private tree over 20 cm (Residential Infill Lot Grading Tree Permit) Boulevard trees protected under a separate highway by-law 	Permit to injure or remove tree	<ul style="list-style-type: none"> Where a permit is applicable fees may apply Remove boulevard tree: \$150 	N/a	<ul style="list-style-type: none"> Applications take up to 30 days to review Appeals are heard by Licensing Committee with notice sent to ward councillor and interested neighbours Final decision made by council 	<ul style="list-style-type: none"> Compensation rates for city trees: \$600 each (1-10 cm), \$500 each (11-20 cm), \$460 each (>21 cm) Compensation rates for private trees: 2:1 replacement for trees ≤40 cm, 3:1 replacement for trees 41-60 cm, 4:1 replacement for trees 61-80 cm, 5:1 replacement for trees ≥81 cm 	<ul style="list-style-type: none"> Comprehensive tree assessment and preservation plan Clear protection requirement Tree permits are issued before grading/servicing is approved Fencing/mitigation must be installed before tree permit is issued Process to deal with committee of adjustment requests The Greenprint, Markham's Sustainability Plan, Official Plan, Trees for Tomorrow Streetscape Manual, York Region Forestry Management Plan support urban forestry. Tree canopy target - 40% by 2051 	<ul style="list-style-type: none"> Securities collected for trees over 40 cm dbh, only returned if trees are not injured. Specifies caliper for replanting (on average 5cm dbh for deciduous and 200 cm height for coniferous) Backyard tree planting program (LEAF) subsidized by city - \$50 to \$100 per tree Failure to comply with tree by-law can result in charges being placed directly on tax roll (cash-in-lieu, compensation, etc.) 	<ul style="list-style-type: none"> Through committee of adjustment can indicate that building permit will not be approved without submission and approval of Tree Assessment and Preservation Plan (early completion ensures building permit is not impacted) If any part of the tree trunk at ground level is located on adjacent property, the adjacent property owner must also provide permission for the application.
3 London	<ul style="list-style-type: none"> By-law to regulate or prohibit injury or destruction of trees Protects any private tree over 50 cm within urban growth boundary Protects trees of all sizes in Tree Protection Area 	Permit to injure or remove	<ul style="list-style-type: none"> Remove private tree over 50 cm: \$100 Injure or destroy a tree within Tree Protection Area: <50 cm is \$100 per tree and ≥50 is \$100/tree up to a max of \$1000 	N/a	<ul style="list-style-type: none"> Applications take up to 60 days to review Decisions can be appealed within 30 days to the Hearings Officer of the City of London 	<ul style="list-style-type: none"> Compensation ranges for city trees from \$1240 (trees <10 cm) to \$13040 (trees <191 cm) 	<ul style="list-style-type: none"> Tree protection plan for all city owned trees and demolition permits, must include all adjacent trees within 3 m of subject property. Adjacent trees that fall within 3 m of subject property must be included/considered for protection Tree Planting and Protection Guidelines Tree Planting Strategy, Urban Forest Strategy, The London Plan support urban forestry. Tree canopy target - 32% by 2065 	<ul style="list-style-type: none"> Zoning bonuses, building heights and densities may be increased to support long-term preservation of existing healthy trees, rare species and wildlife trees. Conditions to require replacement planting can be imposed through tree permit and securities collected. 	N/a
4 Oakville	<ul style="list-style-type: none"> By-law to regulate planting, care, maintenance and removal of all city owned By-law to regulate private trees 15 cm or greater 	Permit to encroach near, or remove a tree (separate applications).	<ul style="list-style-type: none"> \$50 for first tree in 12 month period \$340 for each additional tree and for trees larger than 24 cm \$720 for removal of second tree in a 12 month period (15 to 24 cm) and any removal resulting from development 	<ul style="list-style-type: none"> Permits must be posted on site for 5 days before removal 	<ul style="list-style-type: none"> Appeals committee reviews requests to appeal Applicant may appeal the decision within 21 days of the date of the notice 	<ul style="list-style-type: none"> One tree must be planted for every 10 cm of healthy tree removed (up to 12 trees) \$300 security deposit is required for each tree to be planted Replacement trees must be planted on the same property as those removed, if there is not enough space, the security deposit is used to plant trees elsewhere. 	<ul style="list-style-type: none"> Private tree protection zone based on size of tree, no activities can take place in this zone without a permit to encroach. For removal, arborist report and consent letter from neighbour (for trees on shared property line) are required. Permits must be posted on the site for 5 days before removal Growing Livability – A Comprehensive Study of Oakville's Urban Forest, Urban Forest Strategic Management Plan, Tree Protection and Tree Canopy Preservation Policy support urban forestry. Tree canopy target - 40% 	<ul style="list-style-type: none"> Where tree protection measures are required security deposit is collected and retained for 6 months Minimum tree replacement size is 30 mm caliper deciduous tree, or a 150 cm high coniferous tree. Permitting and compensation costs are high, helping to encourage retention 	<ul style="list-style-type: none"> Trees within the allowable building envelop (zoning) and excavation zone are exempt from tree permits

5	Kingston	<ul style="list-style-type: none"> •By-law to prohibit and regulate destruction or injuring of trees in city •Protects all city owned trees •Protects private trees 15 cm or greater, distinctive trees, endangered trees and those subject to certain planning applications. 	Permit to remove	<ul style="list-style-type: none"> •Remove 1-5 trees: \$97.50, 6-15 trees: \$195.00, more than 15 trees: \$389.75 •Tree permit renewal fees also apply 	N/a	<ul style="list-style-type: none"> •Appeals for permit refusals are made directly to Council 	<ul style="list-style-type: none"> •City trees: Compensation is calculated on a site-by-site basis, but generally, replacement value is calculated using the CTLA Trunk Formula Method. For smaller trees, or trees of lower value, a replacement ratio may be applied. •Private trees: When replacement trees cannot be accommodated on the property, financial compensation is required for removal of trees that require a permit •In new developments, trees in good condition generally require a 1:2 replacement rate 	<ul style="list-style-type: none"> •If a permit is required, the applicant must submit an arborist report to the Planning department. •Guidelines for tree preservation and protection •Tree By-law Guidelines, Guidelines for the Completion of an Arborist Report, Urban Forest Management Plan and Kingston Strategic Plan, 2015 to 2018 all support urban forestry. •Official Plan tree canopy target: 30% 	<ul style="list-style-type: none"> •For private trees, when replacement trees cannot be accommodated on the property, financial compensation is required for removal of trees that require a permit. When replacement trees can be accommodated, the quantity, species and size of replacement trees shall be equivalent in value to the value of tree(s) injured or destroyed. •Financial securities are collected and retained for a minimum of two years. 	<ul style="list-style-type: none"> •Tree loss due to infill is not a challenge in Kingston, most of the actions in the by-law target planning applications and residents.
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