



SUBJECT: Private Tree By-law update

TO: Environment, Infrastructure & Community Services Cttee.

FROM: Roads, Parks and Forestry Department

Report Number: RPF-03-22

Wards Affected: All

File Numbers: 802-11

Date to Committee: March 3, 2022

Date to Council: March 22, 2022

Recommendation:

Approve the recommended changes to the City's existing Private Tree By-law as detailed in the Recommendations section of roads, parks and forestry department report RPF-03-22; and

Authorize the Executive Director of Legal Services and Corporation Counsel to prepare for Council approval a by-law repealing and replacing the Private Tree By-law to implement changes outlined in roads, parks and forestry department report RPF-03-22; and

Authorize the Executive Director of Legal Services and Corporation Counsel to prepare for Council approval a by-law amending the Rates and Fees By-law No. 61-2021 to implement new fees as outlined in roads, parks and forestry department report RPF-03-22; and

Direct the Director of Roads, Parks, and Forestry to provide a status update on the Private Tree By-law to the Environment, Infrastructure and Community Services Committee in Q2 2023.

PURPOSE:

The purpose of this report is to provide an update to Council as to the status of the current City of Burlington Private Tree By-law 02-2020 within the Urban Boundary. In addition, proposed amendments to the bylaw, and associated permit fees and compensation requirements are included for consideration and further discussion.

Vision to Focus Alignment:

The City's Private Tree By-law 02-2020 was initiated as part of the Vision to Focus Plan and the City's declared climate emergency. As part of the Plan, the implementation of a Private Tree By-law falls within the following focus area:

- Focus Area 3: Supporting sustainable infrastructure and resilient environment
- Key actions under this focus area are the development of Burlington's Climate Action Plan and the Urban Forestry Management Plan. The plan's goals of increasing the City's tree canopy and protection of trees, aligns, and is enabled through implementation of the City Private Tree By-law.

Executive Summary:

The social, environmental, and economic value that urban forests provide to communities has been a focus of municipal discourse over the last several years across Ontario and Canada. The City of Burlington has taken steps to promote the growth of the urban forest through the adoption of the Corporate Tree Protection and Enhancement Policy, as well as establishing metrics for success with the City's Vision to Focus document with guidelines for implementation within the City's Official Plan. To support urban forest growth, City council adopted a Private Tree By-law in 2020 within the City's Urban Boundary with the purpose of preserving healthy trees and giving tree removal a sober second thought.

The Public and Private Tree By-laws are administered by the Forest Protection branch of the Forestry section. In addition, this team provides inter-departmental support as subject matter experts for other tree related matters. In 2021, within the development stream, staff reviewed 419 applications for injury or removals, with 285 permits issued. Within the non-development stream, staff reviewed 1,300 applications for injury or removals with 945 permits issued. It should be noted that applications and permits are issued on a per application basis and could include multiple trees. A combined total of nearly 1,370 trees were removed between both permit streams in 2021, regardless of condition or exemption. A total of 1,142 replacement trees will be planted as conditions of these permits, in addition to \$228,000 paid as cash-in-lieu of replacement. These funds are earmarked for investment in incentive-based strategies to support urban forest growth in future.

Since its inception, the bylaw has evolved to better address the specific needs of the Burlington community. In 2021, as part of a staff direction, staff focused on bylaw improvements that have been grouped into three themes:

- 1. Tree Protection Policy**
- 2. Process / Procedural Improvements**
- 3. Private Tree By-law Amendments**

In addition, staff were directed to review the permit fee structure of the bylaw and compensation ratios.

Staff have proposed a permit per tree approach, with a single application stream. As recommended, the permit fees will recover approximately 30% of the total program costs, with the remainder to be funded by the tax levy (70%).

Staff have consulted with both internal and external stakeholders extensively over the last year, with highlights including a virtual public information center (PIC), and facilitated council workshop, both in Q3, 2021.

Through the comprehensive review and refinement of the current by-law, applicable processes, and associated permit fee structure, staff propose to improve the Private Tree By-law to make it simpler, streamlined, and more equitable for residents and businesses alike. The proposed refinement of the Private Tree By-law has been developed over the last two (2) years and has sought to strike a balance between respecting individual property rights, while having a framework to preserve, protect, and grow a critical community resource that is a 'made in Burlington' solution.

Background and Discussion:

The importance of urban forests and the value they provide to municipalities, specifically as it relates to climate change mitigation has been the focus of municipal discourse over the last several years across Ontario and Canada. It is clear now more than ever, urban, and peri-urban regions need trees, as they provide a great deal of social, environmental, and economic benefit to a community.

For the City of Burlington, the importance of trees is reinforced through the Council's declaration of a Climate Emergency, with metrics for success incorporated within the City's Vision to Focus (V2F) document (35% canopy cover goal by 2040), and guidelines for implementing said goals within the City's Official Plan.

The importance of canopy cover and a healthy urban forest has also been extensively researched. For example, Dr. Cecil Konijnendijk has recently published an important metric related to urban forestry success: the 3-30-300 rule. In essence, every person should be able to see 3 mature trees from their home; a municipality should have a 30%

canopy cover at a neighbourhood level; and every person should be able to access greenspace 1 hectare (ha) or greater within 300 meters of their home.

In order to maintain this valuable community resource and achieve canopy cover goals long-term, it will require the support and commitment from the entire community, as the City only owns approximately 15% of the land area within the urban boundary.

Finally, the growth of the urban forest cannot be achieved by tree planting initiatives alone. The preservation and protection of existing forest and tree assets is integral to the long-term viability and resiliency of the urban forest on both public and private land.

Purpose:

The Private Tree Bylaw is a tool that supports the City's long-term goals for canopy growth by preserving healthy trees. For the Private Tree By-law to be effective long-term, a balanced approach is required that addresses the need to preserve trees on private property and view private trees as part of a community resource, but also respects an individual's ability to maintain their personal property. In addition, the bylaw should be easy to understand and equitable for residents and businesses alike as a 'made in Burlington' solution.

Incentive & Regulation Based Strategies

A combination of incentive and regulation-based strategies are required to achieve the V2F goal of 35% canopy cover by 2040. Although the Private Tree By-law is considered a regulation-based strategy, it helps to fund several incentive-based strategies including but not limited to free tree giveaways, community planting events;; maintenance subsidies and more.

Private Tree By-law Program Review

The City of Burlington Private Tree By-law 02-2020 was implemented within the City's Urban Boundary on January 27, 2020. The City's Public Tree By-law 068-2013 remains in force and effect City wide (inclusive of the Rural Boundary limits).

In 2021, staff submitted reports to council as a measure to report back on the status of the Private Tree By-law and have included recommendations to improve its administration. The timeline below in **Table 1** includes key milestones and reference to applicable report numbers:

Table 1: Key milestones

Year	Milestone commentary
January, 2021	Staff conduct facilitated workshop on the Private Tree By-law with council and members of BLT present
May, 2021	Staff submit recommendation report, RPF-07-21 'Private Tree By-law Implementation Update. Report is referred to staff with request for additional information related to indirect costs.
June, 2021	Staff submit supplemental report, RPF-19-21 'Follow Up Report to City Tree By-law 02-2020'. Council passes a staff direction SD-20-21, whereby staff are to address how 15 proposed amendments may be incorporated into the by-law. Amendments are grouped into themes related to: by-law; policy; procedural changes.
June to September 2021	Ongoing discussion and consultation with internal stakeholders to evaluate the impact of the proposed amendments.
October 2021	Public information center (PIC) held virtually to discuss draft guiding principles of a Corporate-wide Tree Protection & Enhancement Policy. Online survey and FAQ page launched on the Get Involved Burlington Page.
November 2021	Staff conduct facilitated council workshop framed around the draft Corporate-wide Tree Protection and Enhancement Policy as well as discussion on the proposed 15 amendments of staff direction SD-20-21.
February 2022	Staff submit recommendation report RPF-01-22 'Proposed Corporate Tree Protection and Enhancement Policy'.

Program Statistics

Development (Construction) Stream

Development (Construction-related) tree permit applications are received through the consolidated pre-building permit application process. These applications are taken in by the Residential Development Technologists in the Community Planning Department and circulated to Forestry for review and comment on all submissions.

As of December 31, 2021, staff received a total of 419 construction related tree permit applications. Out of the 419 applications, staff issued 285 tree permits as of January 17, 2022. The remaining files are either on hold (116) or were withdrawn (16). A summary of the application and permit status of 2021 files is illustrated in **Figure 1**
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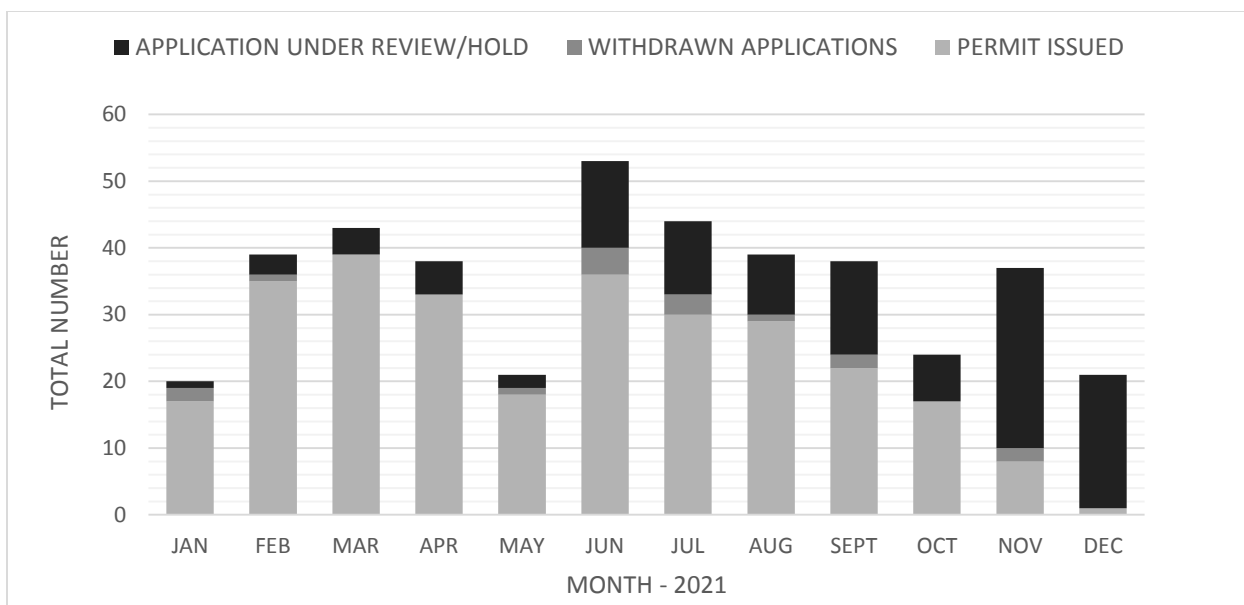


Figure 1: 2021 Development tree permit application and issuance summary

Non-Development Stream

Non-development tree permit applications are received through a web-based application on the Forest Protection webpage, taken in over the phone or received by mail.

As of December 31, 2021, staff received a total of 1,300 non-development tree permit applications. Out of the 1,300 non-development tree permit applications, staff issued 945 tree permits as of January 17, 2021. The remaining files are either on hold (277) or were withdrawn (77). A summary of the application and permit status of 2021 files is illustrated in **Figure 2**Error! Reference source not found..

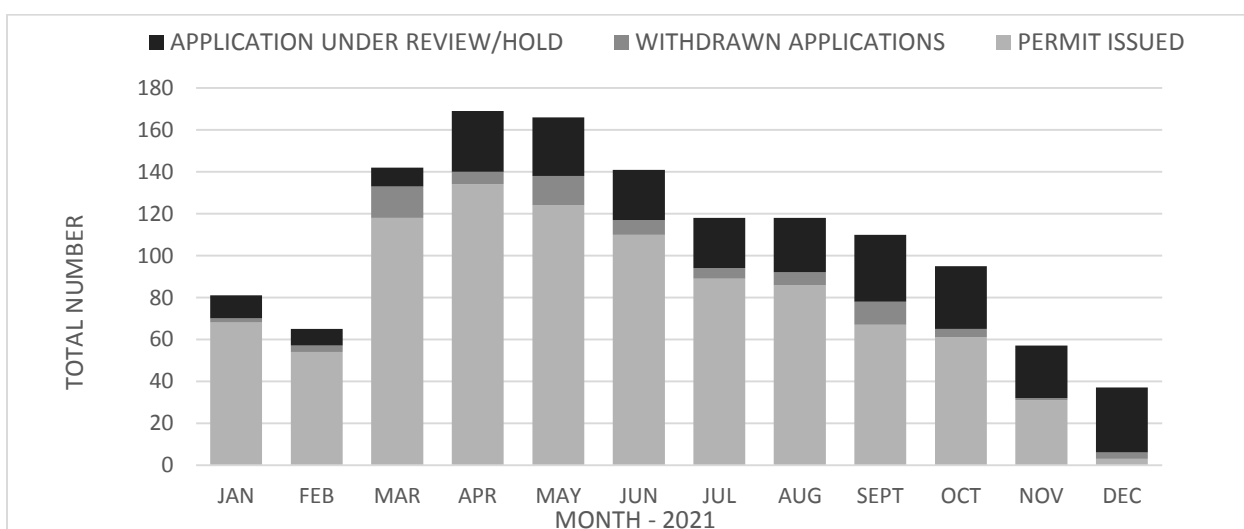


Figure 2: 2021 Non-development tree permit application and issuance summary

Permits issued by Project Type

A summary of permits issued by project type is provided in **Table 2**. As noted, the City issued 285 development tree permits and 945 non-development tree permits (including exemption permits). The majority of development tree permit applications received were associated with additions, either first and/or second story, followed by new home builds and decks. The majority of non-development tree permit applications received were associated with general tree removals, followed by pools and general landscaping/hardscaping projects.

Table 2: Permits issued by project type in 2021

Project Type	Number of Permits Issued
Development	
New House	55
Basement Walkout	9
Accessory Structure	22
Additions (first & second story)	80
Cabana/Gazebo/Pergola	16
Deck	42
Porch	19
Dormer	1
Roof over existing deck or porch	26
Other development type	15
Non-Development	
General Tree	651
Pool/Swim spa/Hot tub	245
Patio	6
Fence	9
Driveway	2
Landscaping	28
Retaining Wall	2
Servicing	2

Tree Removals

A summary of overall tree removals across both permit streams within the City's urban boundary in 2021 is illustrated in **Figure 3**. A total of 734 general trees were removed that were not related to an exemption, 310 trees with a terminal condition, 128 dead trees, 104 trees within two (2) metres of an occupied building were removed, and 91 trees considered high-risk or imminently hazardous.

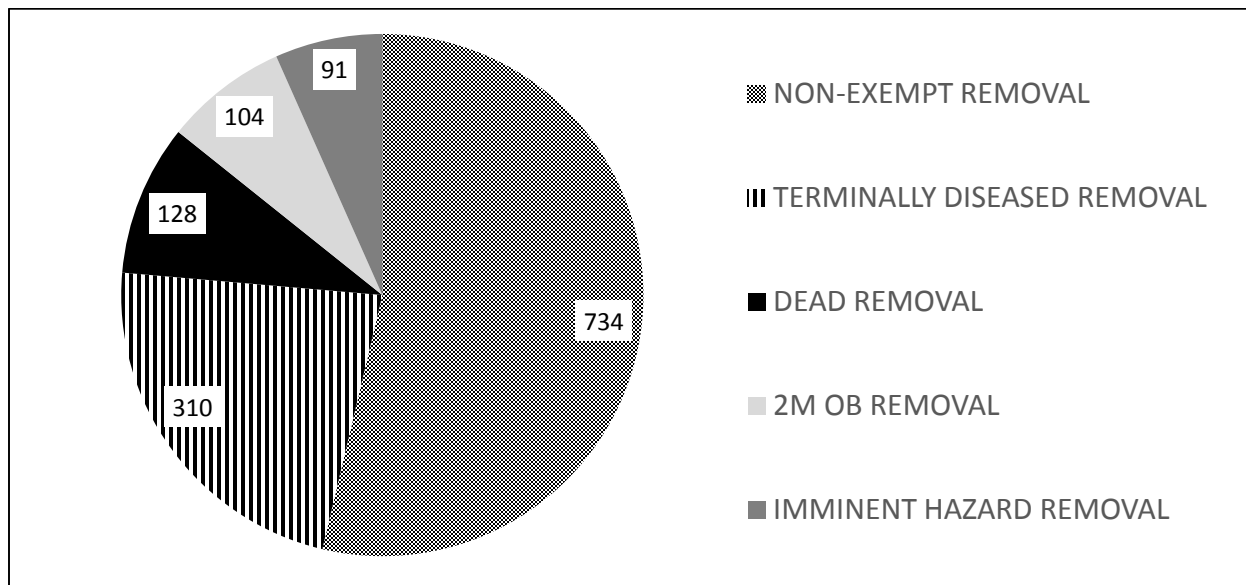


Figure 3: 2021 Tree removal data

An analysis of trees that were removed based on size was completed with the majority of removals recorded in the 20 to 35 cm diameter range. **Figure 4** summarizes non-exempt tree removals based on the diameter class of removals that were subject to permit fees and compensation, including those removals that were within two (2) m from an occupied building. This was done to provide a representation of those trees removed that were not exempt due to a poor structural or health related reason.

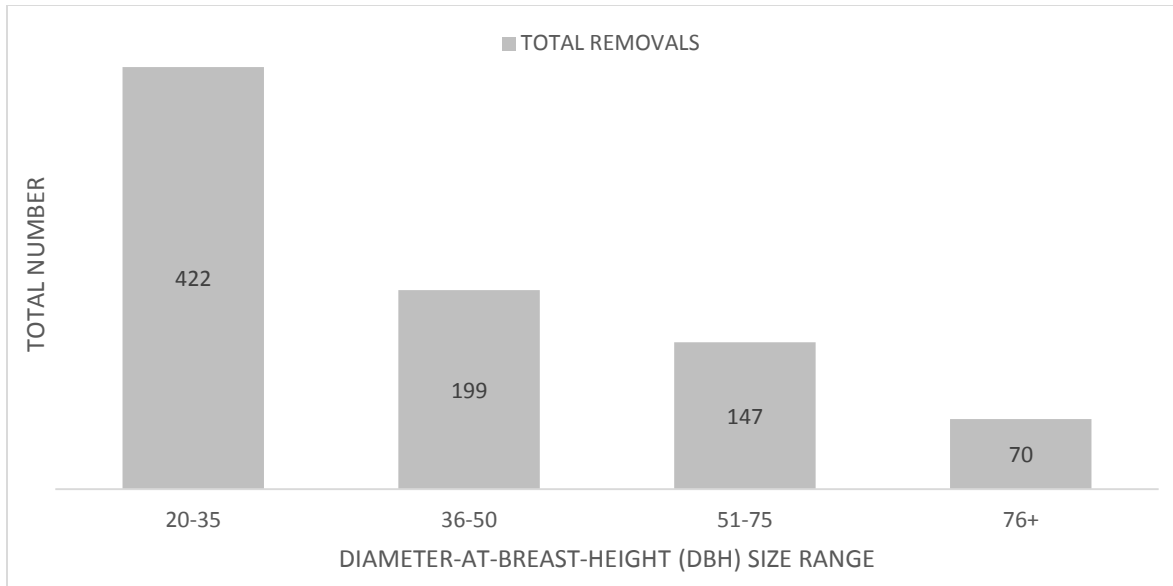


Figure 4: Summary of removals in 2021 that were neither dead, terminally diseased or considered high risk or hazardous

Another metric that staff tracked was species composition of the primary species being removed from the urban forest canopy. **Table 3** provides a list of the top ten trees removed in 2020 and 2021 in order based on tree genus type. Through the course of the two (2) years, similar species were represented, but in 2021 staff observed an increase in the number of Maples removed compared to Ash, in addition to other tree genus types compared to Cedars. Gaining an understanding of the composition of tree removals will help the City in biodiversity planning strategies moving forward.

Table 3: Overview of the top ten tree species removed 2020 and 2021

	2020	2021
1	Ash	Maple
2	Maple	Ash
3	Cedar	Spruce
4	Spruce	Fruit Variety*
5	Pine	Locust
6	Oak	Birch
7	Birch	Pine
8	Locust	Cedar
9	Fruit Variety*	Oak
10	Beech	Basswood

**Fruit variety includes apples, plum, pear, and cherry species.*

Trees per Permit

An additional statistic provided in **Figure 5**, illustrates how many permit applications included more than one tree. More specifically, **Figure 5** illustrates those permits that included only one (1) tree, and those that contained more than one tree. As illustrated, approximately 70% of the permits issued were for one (1) tree, and 30% included more than one. The number of permits where multiple trees have been removed has been factored into the proposed recommendation section by staff to implement a permit per tree approach vs. a permit per application approach to provide staff recovery where multiple trees are involved with a review.

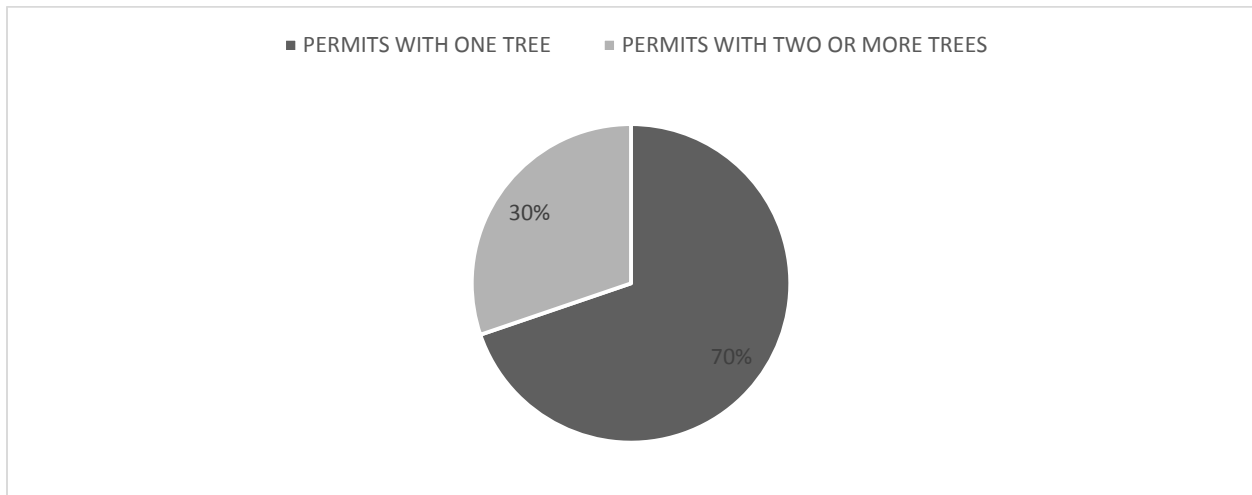


Figure 5: Number of permits issued in 2021 with one or multiple trees

Replacement Tree Planting

As part of the Private Tree By-law, trees of permissible size are required to be replaced, either through the planting of replacement trees, or by providing compensation as cash-in-lieu. Compensation is calculated based on the overall health and structure of the tree as well as its size (Diameter-at-Breast-Height (DBH)). In general, for every 10 cm removed, one (1) tree is required to be replaced. The cash-in-lieu value is \$400/tree, which is planned for tree planting elsewhere in the City, and earmarked for tree planting on private property first. Based on the tree permits issued in 2020, a total of 1,015 trees were to be planted in 2021, as applicants are provided one year from the date of permit issuance to plant. Based on the review of replanting during 2021, the City observed a 70% success rate of trees planted and 30% that remain outstanding. Of the trees that were planted roughly 75% were coniferous (evergreen) and 25% were deciduous (broadleaf), with the dominant species planted consisting of cedars. The number of cedars planted, and/or coniferous trees planted as replacement of large deciduous trees has been factored into staff's recommendations for clarifying replacement tree requirements within the by-law to ensure that replacement trees are a better

representation of the trees removed and consist of species that will help maintain and increase the City's canopy overall.

Based on the permits issued in 2021, a total of 1,142 trees will be required to be planted in 2022 (the equivalent cash-in-lieu value of \$456,800). Cash-in-lieu collected as part of the tree permits issued was equal to \$228,000, which is equivalent to 570 trees. Staff did see an influx in the amount of cash-in-lieu payments obtained compared to 2020 (\$57,400).

Forest Protection Workload and Evolution

The Forest Protection branch is made up of five (5) full time staff, including the Supervisor of Forest Protection, responsible for the overall program administration and tracking; Urban Forest Coordinator whom provides administrative support to application intake and review; and three (3) Forest Protection Officers that review both development and non-development stream applications (Refer to **Figure 6**).

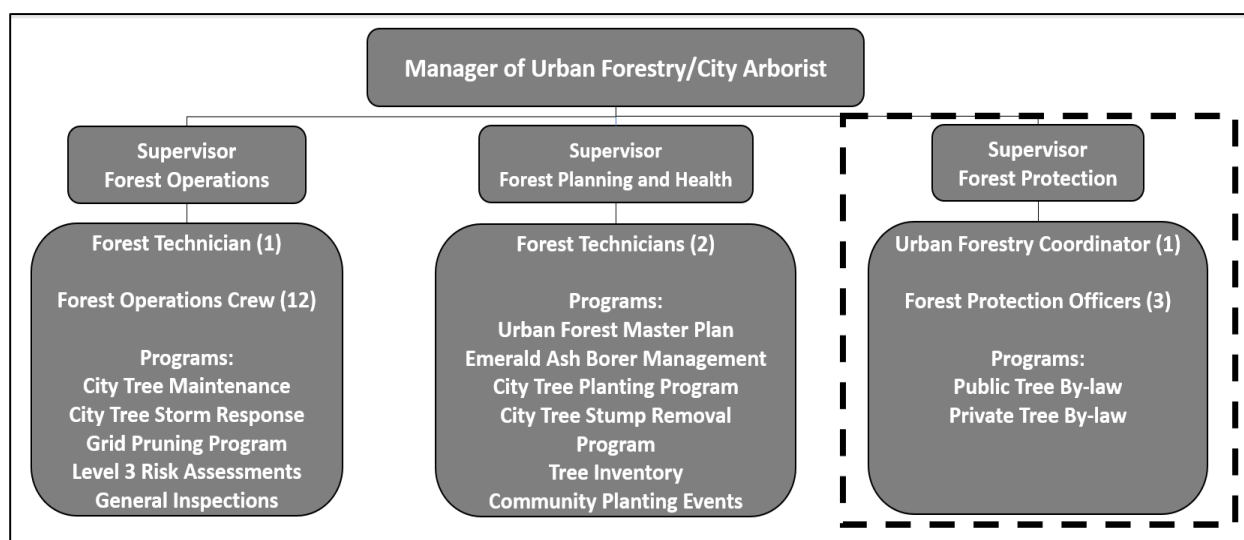


Figure 5: Forestry Organizational Chart

There was a substantial uptick in permits received in both development and non-development streams when comparing 2020 and 2021 permit numbers. For the development stream there was an increase of 58% from 2020 for development applications. For the non-development stream, there was a 30% increase from 2020. It is theorized that the increase in permit applications is the result of COVID-19 restrictions, whereby residents were spending money to improve their properties rather than travel. For 2022, it is expected the permit volume to decrease slightly as COVID restrictions continue to be lifted. The combined total to review both development and non-development streams in 2021 was 8,550 hours, the equivalent of four (4) staff working full time (4 FTE).

Prior to the creation of the Forest Protection branch, the administration of the public tree by-law was done so within the Forest Planning and Health branch. This work was done when time allowed due to lack of staff capacity. This led to inconsistencies in its administration, with numerous contraventions taking place without corrective action, and no compensation for any canopy impact. At the time, partner departments provided additional support with respect to the review of site plan and other planning related applications.

The original intent of the Forest Protection branch was to administer both the Public and Private Tree By-laws. Since that time, the scope of support of this team has expanded significantly to also include the review of several planning related applications that are legislatively beyond the purview of tree by-laws under section 135 of the Municipal Act, providing inter-departmental support with respect to construction related impacts to trees from private developments and public projects, and act as subject matter experts when required. This work is critical in supporting the preservation of trees on both public and private property and equates to 22% of the total staffing complement within the branch (\$135,000), nearly one (1) full time equivalent (FTE) position. None of the cost associated with this work can be recovered through any permit or application fee, with the exception of site plan applications or plan of subdivision applications that are subject to a public tree permit. It therefore is appropriate to retain this work within the scope of the Forest Protection branch as the subject matter experts, as it is directly related to its mandate of tree protection and preservation. An overview of the percentage of files reviewed by Forest Protection staff is illustrated in **Figure 7**.

In future, there is value in allocating staffing resources toward incentive-based strategies for urban canopy growth initiatives. This includes a strong component in community outreach and engagement through a multi-tiered tree planting campaign, which supports the third and fourth guiding principle within the City's Tree Protection and Enhancement Policy: Establish, Replace, and Enhance, and Engage & Collaborate, respectively. An example of this would be to liaise with residents whom have recently removed a dead tree from their property and offer them a free replacement tree.

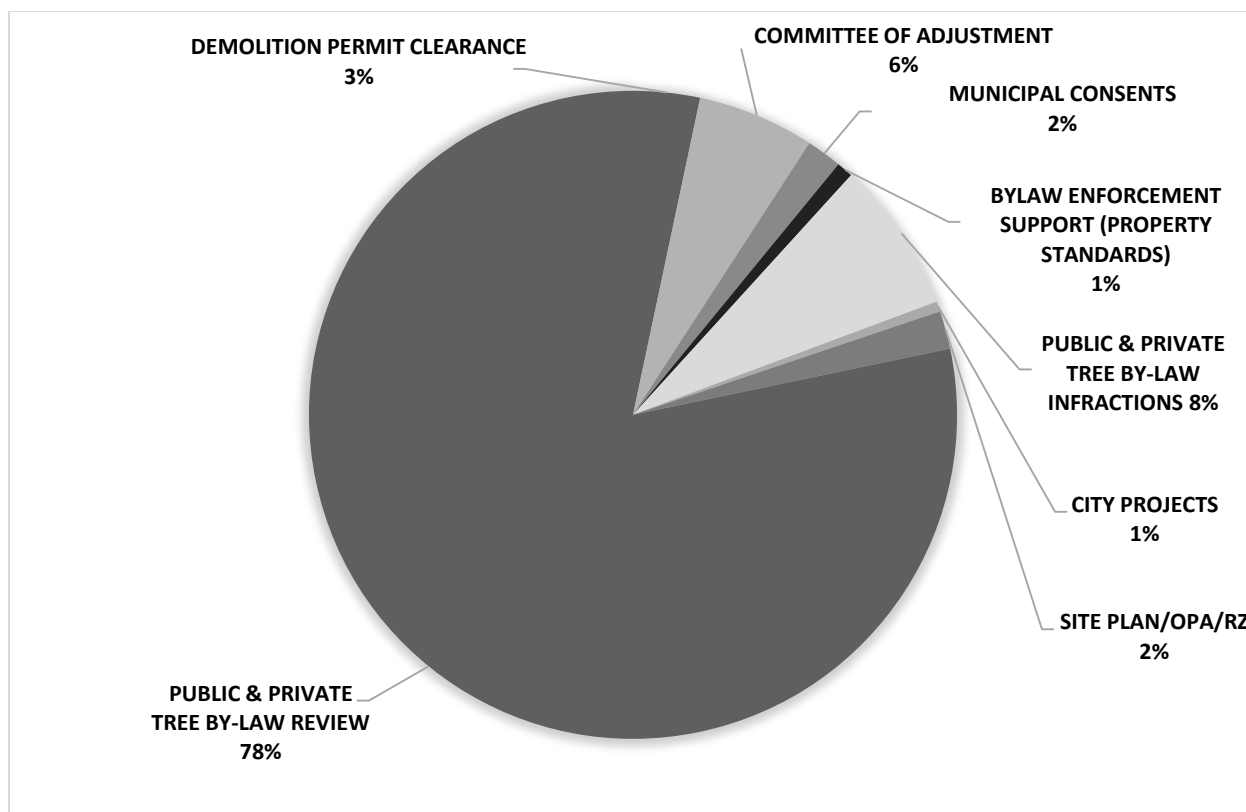


Figure 6: Percentage of file types reviewed by Forest Protection in 2021

Strategy/process

Each of the 15 amendments that were introduced at the June EICS committee meeting were grouped into themes related to **policy, process improvement / procedural modification, and by-law changes**. Staff have since established a logical path forward that is related to each of these themes, and they will each improve the integrity and efficacy of the Private Tree By-law.

Corporate Tree Protection and Enhancement Policy

When the by-law was first passed, it was done so without the foundation of a corporate policy on tree protection for public and private lands. This policy plays an integral role in establishing a clear and consistent corporate position on tree protection and informs not only the development and refinement of several by-laws (including both Public and Private Tree By-laws) but also the improvement of other guideline documents, and specifications. Conversely, once established, each of these by-laws, guidelines, and specifications will support the administration and enforcement of the corporate policy. In addition, the establishment of a corporate policy for the protection of enhancement of trees satisfies a legislated requirement under section 270, (1) which states:

"A municipality shall adopt and maintain policies with respect to the following matters:

7. The manner in which the municipality will protect and enhance the tree canopy and natural vegetation in the municipality."

The Corporate Tree Protection and Enhancement Policy was passed unanimously at the EICS committee on February 3, 2022. One of the four (4) guiding principles of the Corporate Tree Protection and Enhancement Policy is 'Preserve and Protect'.

Procedural/Process Improvements

Since the implementation of the current Private Tree By-law, staff have compiled additional information in the interest of achieving process efficiencies and greater effectiveness of the Private Tree By-law, which will lead to greater customer service and experiences long term.

Completed Process Improvements

CRM Integration

The CRM rollout for Roads, Parks, and Forestry took place in September, 2021. As part of the roll out, forestry staff created knowledge-based articles (KBAs) that are used by Service Burlington staff to reference for resolution of 'Tier One' inquiries from members of the public. When inquiries cannot be resolved at a tier one level, tier two cases are created that are a 'worked' by Forest Protection staff, as subject matter experts. **Figure 8** below illustrates the volume of tier two calls that have been received and resolved since September (330 total).

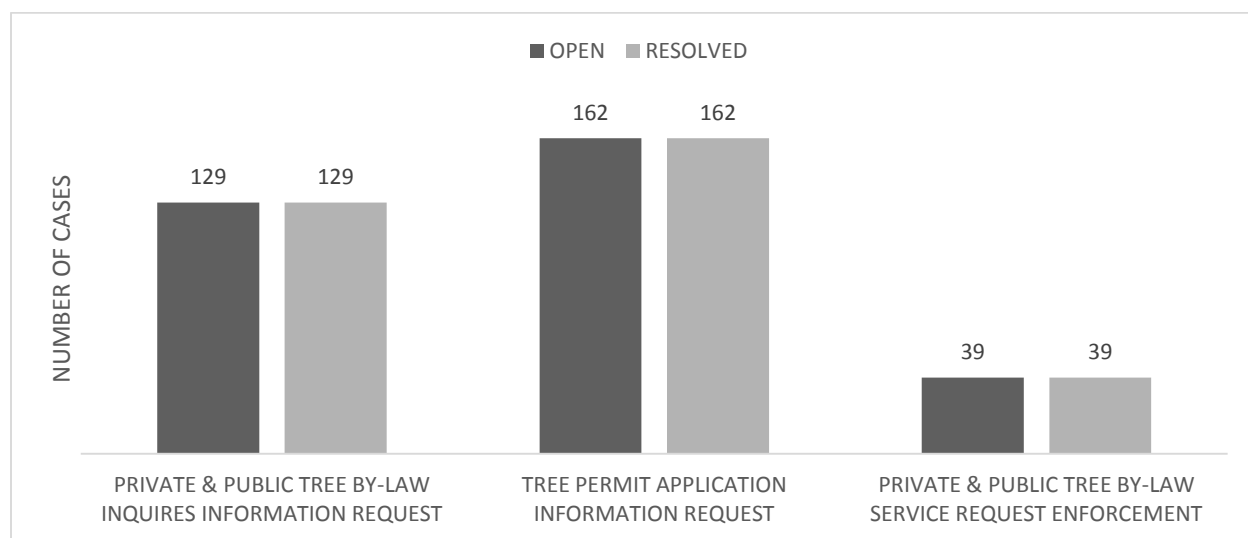


Figure 7: 2021 CRM cases open and resolved since implementation

Combined Residential Swimming Pool Permit Application Process

To better serve the customer when applying for a pool, swim spa or hot tub, forest protection staff took part in creating a combined residential swimming pool permit application with the zoning department within Community Planning, and by-law within the Building and By-law department. Prior to the combined pool permit application, residents were required to apply to each department separately. This combined process now allows for an applicant to submit a single application which is distributed to zoning, forestry, and building staff for a concurrent review. This process is administered by the Residential Development Technologists in the Community Planning Department, similar to the consolidated pre-building permit process. This revised application, which includes a declaration component within the application form, launched December 1, 2021. In addition to this form, amendments were also made to the webpages to assist the customer in requirements and understanding of the process.

Tree Declaration Form

There are circumstances where applicants either do not have trees or are not impacting trees by their proposed works. To satisfy the requirements of construction related application through the consolidated pre-building permit process or through the pool process, applicants would be required to submit a permit application for clearance and added to the queue. As applications are processed on a First In, First Out basis (FIFO), this would add unnecessary delays to projects without any tree impacts. Staff have since developed a declaration form to mitigate this issue, where applicants can now submit a declaration form and bypass the forestry review requirement altogether. Auditing a percentage of these submissions is important to ensure this mechanism is being utilized properly. This declaration form has been directly implemented in the new combined pool application form. The declaration form was launched in September 2021.

Webpage Updates

In September 2021, staff revamped the current Forest Protection webpage to provide information in a clear and concise manner pertaining to both the Public and Private Tree By-law as well as subsequent information on how to measure trees, determine tree permit and compensation requirements as well as links and form information.

Future Improvements

Tree Permit Application Form and Integration with AMANDA

One of Council's recommendations for consideration by staff was to create a streamlined online application process which would improve process time by completing desktop reviews where applicable.

Forest Protection already has an online tree permit application for non-development projects (pools excepted), but it has limitations in terms of file sizes for uploads as well as the information collected. As such, staff began working towards a revised tree permit application form in July 2021 to provide the ability for the customer to document clear information about their trees, and the ability to upload photographs and other documentation. This will assist in limiting requests made to customers following receipt of the application as well as provide the ability for staff to complete desktop reviews for dead or terminal conditioned trees where applicable. Upon further review of the form with Information Technology Services (ITS) and the Clerks departments, combined with staffs' plans for AMANDA integration, the software used to build the form changed to the Smartguide platform. Given the resource capacity of ITS, the form has now been outsourced and a kickoff meeting was held on January 28, 2022.

Forest protection staff plan to launch a new tree permit application form with the ability to integrate with AMANDA in Q2 2022. This tree permit application form will be for those tree permit applications not related to a building permit (e.g., consolidated pre-building permit process), or a pool/swim spa/hot tub (e.g., combined residential swimming pool application).

Desktop Application Reviews

In 2021, a combined total of 400 tree permits were issued that were related to the removal of dead or terminally conditions trees, those within two (2) metres of an occupied dwelling, and/or verified to be imminently hazardous trees. In the interest of improving process efficiencies and customer experience, staff will be introducing desktop reviews of these application types as well as single tree removals, not associated with a development application. This process efficiency is directly linked to the tree permit application form with AMANDA integration noted in the previous section, as photographs and other supporting documentation will be required. With the new form, it is expected that forest protection staff will be able to review these tree permit applications without having to visit the site. In the event that insufficient information is included in the application, staff reserve the ability to visit the site to verify and audit files for accuracy purposes, particularly during leaf-off conditions which is typically between November and May in any given year

With this improvement, reduced review times are anticipated, thus reducing the overall wait time for permit application reviews. This result is contingent of sufficient documentation being provided by a Qualified Professional to validate exemption criteria being met (e.g., an ISA Certified Arborist). However, given the cost of this service, applicants may be more inclined to pay a permit fee for removal and wait in the queue. It should also be noted that one drawback of the desktop review would be the reduced opportunity for staff to engage with residents and discuss the value of trees and their

contribution to the urban forest, with the intent to minimize the number of tree removals or injuries.

Creation of Residents/Homeowners Guide

The creation of a resident's guide to forest protection is intended to be used as a 'self-help' resource for residents to gain a better understanding of the inner-workings and requirements of both the Public and Private Tree By-law. For example, the guide will provide a stepwise approach to measuring diameter at breast height and providing details on how to work around trees. This guide will also provide details on the quality of work that is to be expected in the completion of an arborist report and tree preservation plan, which will better educate the customer and/or homeowner on what to look or ask for when consulting with Arborists, as well as to better understand requirements to ensure compliance with the City's tree by-laws. The guide will be formatted as a web-friendly document with the option to print hard-copies, should residents choose.

Recommendations: By-law Amendments

As a commitment to Council, staff reviewed the existing Private Tree By-law and incorporated feedback from internal and stakeholder experiences since implementation. Several improvements to the document are necessary to provide greater clarity. This will assist in streamlining the process and improve efficiency overall for both staff and the customer. As such, in keeping with the spirit of providing greater clarification and simplifying the process, a full update of the existing By-law is recommended by staff. This will allow for a clean document without noted amendments providing a greater ease of understanding for the general public and other applicants. The recommended Private Tree By-law will be brought forward following the discussion and result of this report. A summary of key changes identified within the By-law includes:

Clarification to various existing and introduction of new definitions such as:

- | | |
|-----------------------------------|--------------------------|
| ○ Administrative Monetary Penalty | ○ Injure/Injury |
| ○ Arborist Report | ○ Officer |
| ○ Diameter at Breast Height | ○ Qualified Professional |
| ○ Destroy/Destruction | ○ Replacement Tree |
| ○ Emergency Tree Work | ○ Significant Tree |
| ○ Heritage Tree | ○ Terminal Condition |
| ○ High Risk Tree | ○ Woodland |

Refinements to sections of the By-law

- 1.0 Removal of protection of trees between not more than five (5) with a diameter-at-breast-height (DBH) of greater than 10cm and less than 20cm in one calendar year;
 - This provision was rarely used in 2020 and 2021 and was largely applicable to hedges. Removal of this provision will assist in ease of understanding of the By-law and will help simplify the permit process.
- 2.0 Removal of the exemption from permit fees and compensation for those trees within two (2) m from an occupied building;
 - The intent of this exemption was to allow for maintenance activities. This is recommended to be removed given that for the most part no actual maintenance activities were being performed and this resulted in a number of healthy trees being removed with no fees or compensation. The removal of this exemption provision will help streamline the process and limit the confusion of its applicability.
- 3.0 Introduction of an exemption from tree permit fees where trees need to be injured and/or destroyed to allow for certain structural and maintenance type work with the support of prescribed documentation. Provisions are already in place for emergency works to address immediate repair needs.
- 4.0 A requirement that replacement plantings be maintained in good condition for a given period.
 - A large number of trees are being removed with replacement trees proposed for planting to compensate for loss in canopy coverage. It is important to ensure protection and/or maintenance of those trees to ensure they are not removed and continue to grow. The minimum size of trees to install is currently 30 mm caliper for deciduous trees and 125 cm in height for coniferous trees. It would be quite some time before each of those trees reached 20 cm to warrant protection under the By-law. Providing this additional provision is designed to help achieve the goal and intent of the By-law which is to regenerate the canopy removed.
- 5.0 Requiring a replacement tree deposit;
 - A deposit will be collected for all replacement trees to be planted equivalent to the cash-in-lieu value of \$250 per replacement tree and refunded upon confirmation by staff that the trees have been planted. This will help reduce resource time following up with customers on replacement tree plantings, and also ensure trees that are removed are replaced, particularly in the event a property is sold prior to the one-year planting time frame provided.

6.0 Providing ability to plant trees on alternate private property within the City's Urban Planning Area Boundary;

- This may require the creation of an agreement type document between both parties as the replacement trees would also be subject to protection measures under the by-law for a given period as established with changes outlined in item No. 4.0 above.

7.0 Identification of a review process in relation to tree permit denials;

- The City already has an informal review process where matters can be escalated for review. The identification of this review process for tree permit denials within the By-law will be added to provide clarification and assist in transparency.

8.0 Adding a provision under the authority for permit refusal for significant and healthy trees;

- The ability for City staff to deny the removal of significant and healthy trees is a critical step in the protection of the urban canopy and coincides with the City's new Tree Protection and Enhancement Policy that was approved in February 2022. Elements of this denial process will be fine-tuned to ensure there is a formal, defensible rationale for the denial of the tree permit, so as to eliminate arbitrary decisions.

9.0 Introduction of administrative monetary penalties (AMPs);

- The introduction of AMPs will allow a more efficient process for penalties related to Tree By-law infractions and result in reduced reliance on charges applied through the Court system. The Administrative Monetary Penalties By-law and program is in the process of being established for By-laws other than Parking. The implementation of AMPs within the Private Tree By-law will be dependent on the launch of the revised By-law to be approved by Council.

10.0 Introduction of a mandatory posting of tree permits, with additional requirements for significant trees;

- Individuals will be required to post a tree permit in a conspicuous location during the duration of the tree removal, and/or during the duration of their project where injuries have been permitted;
- For those significant trees, to which a permit to remove has been granted, a provision will be added that requires the individual to post their permit in a conspicuous location for a period of seven (7) calendar days prior to removal operations. This is intended as a passive means of communication with surrounding residents that may be impacted by the proposed tree removal.

Recommendations: Fee Structure

The current fee structure is a two-tiered, per application format. Development related projects are subjected to a higher fee than that of a non-development application. Trees that are dead, diseased, high risk, or within two (2) metres of an occupied building are exempt of all fees and compensation, but still require a permit. Based on the current permit fee collection model, the estimated recoveries are approximately 30% of the total program costs.

For 2022, permit fees are as follows:

Development related permit fee:	\$700
Non-development related permit fee:	\$400

Option 1: Permit Per Tree, Single Stream (Recommended)

A single stream would be established, on a per tree basis. This approach balances the need to establish greater equity amongst applicants with a sliding scale of permit costs for larger scope projects. This format also provides for a simplified permitting structure, which allows the ease for the customer to not distinguish between what is considered development versus non-development. This single stream will also include a non-refundable application fee to help cover staff time. Note, the non-refundable application fee is based on estimated quantities received in 2020 and 2021. This accounts for all application types including those on hold or withdrawn, to account for staff time, and does not necessarily reflect only where a permit was issued. As presented, the fees are estimated to recover 30% of the total program costs.

Proposed permit fees:

Table 4: Permit per tree, single stream

Fee Type	Estimated Quantity	Unit Rate Per Tree	Est. Annual Recoverable
Non-refundable Application Fee	1100	\$50.00	\$55,000.00
Permit Per Tree - 1st removal	330	\$225.00	\$74,250.00
Permit Per Tree - 2nd and subsequent removal	375	\$125.00	\$46,875.00
Permit Per Tree - (Injury)	135	\$75.00	\$10,125.00

Fee Type	Estimated Quantity	Unit Rate Per Tree	Est. Annual Recoverable
Cash-in-lieu of Replacement Compensation Per Tree / Security Deposit		\$250.00	
Permit Extension/Renewal/Transfer Fee		\$50.00	
Compliance Inspection Fee Per Inspection		\$500.00	
Estimated Total			\$186,250.00

Advantage: Simpler permitting cost structure

Disadvantage: Less equity amongst applications

Replacement Compensation:

Under the current by-law, replacement for canopy loss is calculated by measuring the diameter of the subject tree at breast height (DBH) and multiplying it by a condition rating percentage. This depreciated diameter is what is used to calculate replacement tree requirements, which is one (1) tree for every 10 cm removed, or the equivalent cash-in-lieu of \$400 per replacement tree. This appraisal methodology is based on industry best practice.

It has been identified however that this approach is difficult to understand, is considered complex and does not allow the customer to forecast tree replacement requirements. In addition to this, staff have identified that a higher cash-in-lieu dollar value has led residents to plant more undesirable tree species rather than paying the cash-in-lieu-fee, which won't provide significant value to the urban forest. In consideration of these points, staff have provided options for consideration for tree compensation:

Option 1: Replacement ratio and reduced cash-in-lieu fee (Recommended)

Replacement tree quantities are calculated based on ratios that correspond to the size of the tree removed. Cash-in-lieu of replacement values are reduced from \$400 per replacement tree to \$250 per replacement tree. For example, a tree that is 20 cm DBH will require two (2) replacement trees to be planted, or cash-in-lieu payment of \$500.00 or combination of the two (i.e., one (1) tree, and cash-in-lieu of \$250.00).

Table 5: Proposed replacement ratio

DBH (cm)	Compensation Ratio
20 – 35 cm	2:1
36 – 75 cm	3:1
>76 cm	4:1

Rationale: The establishment of a compensation ratio will simplify the process for estimating the number of replacement trees required. In addition, the reduced cash-in-lieu-fee may reduce the number of undesirable tree species planted and increase the cash-in-lieu dollars collected for investment in trees elsewhere in the City.

Advantage: Easier process to understand. Less undesirable species planted

Disadvantage: Condition ratings are no longer considered when determining the number of replacement trees required (i.e., excellent and poor condition trees would be subject to the same compensation requirements). In some cases, residents would be required to replace with more trees in contrast to the existing compensation ratio but pay less per tree in cash-in-lieu.

Options Considered

As part of the development of the recommendations above, several options were considered by staff. A summary of options considered is provided below:

Fee Structure:

Option 2: Permit Per Tree, Two-Tiered Stream

This option modifies the current fee format to a permit per tree approach while retaining a tiered format depending on project type. Modifications will be made to lump all project related applications into one-tier and general tree removals not associated with a project into another. In addition, staff have included a non-refundable application review fee for construction related application only. As presented, the fees are estimated to recover 30% of the total program costs.

Proposed permit fees:

Table 6: Permit per tree; two tiered stream

Fee Type	Estimated Quantity	Unit Rate	Est. Annual Recoverable
Non-refundable Application Fee (Construction/Project related)	1,100	\$50.00	\$55,000

Fee Type	Estimated Quantity	Unit Rate	Est. Annual Recoverable
CONSTRUCTION			
Permit Per Tree - 1st removal; construction related	100	\$400.00	\$40,000
Permit Per Tree - 2nd and subsequent removal	140	\$100.00	\$14,000
Permit Per Tree - (Injury)	135	\$75.00	\$10,125
GENERAL			
Permit Per Tree - 1st removal; general	230	\$175.00	40,250
Permit Per Tree - 2nd and subsequent removal	235	\$100.00	\$23,500
Cash-in-lieu of Replacement Compensation Per Tree / Security Deposit		\$250.00	
Permit Extension/Renewal/Transfer Fee		\$50.00	
Compliance Inspection Fee Per Inspection		\$500.00	
Estimated Total			\$182,875

Rationale: Construction related applications require up to twice the amount of time to review by staff and therefore should be charged a commensurate fee. In addition, the introduction of a sliding scale for permitting fees allows for the recovery of staff time when reviewing applications of larger scope. The introduction of a nominal administration fee for application processing provides an additional means of cost recovery.

Advantage: Establishes greater equity amongst applications and is a simplified process to distinguish between completing a project, or not completing a project.

Disadvantage: More complex permitting structure and may result in customers applying through the cheaper permit stream to avoid higher costs.

Option 3: Permit Per Application Single Stream

A single permit fee would be established for all tree removal requests regardless of the project type or the number of trees being removed on the application. As presented, the fees are estimated to recover 30% of the total program costs.

Proposed permit fees:

Table 7: Permit per application; single stream

Fee Type	Estimated Quantity	Unit Rate	Est. Annual Recoverable
Non-refundable Application Fee	1,100	\$50.00	\$55,000.00
Permit Application	400	\$325.00	\$130,000.00
Cash-in-lieu of Replacement Compensation Per Tree / Security Deposit		\$250.00	
Permit Extension/Renewal/Transfer Fee		\$50.00	
Compliance Inspection Fee Per Inspection		\$500.00	
Estimated Total			\$185,000.00

Rationale: Converse to option 1, the single application fee does not factor staff time required to review permit applications of greater or lesser scope. Further, a per project format compounds inequities further as multiple tree removal applications would be charged the same amount as single tree applications.

Advantage: Very simple permitting cost structure

Disadvantage: High inequity amongst applications

Option 4: Permit Per Application Two tiered

This option would consolidate all project related applications into one-tier and general tree removals not associated with a project into another. In addition, staff have included a non-refundable application review fee for construction related application only. As presented, the fees are estimated to recover 30% of the total program costs.

Proposed permit fees:

Table 8: Permit per application; two tiered stream

Fee Type	Estimated Quantity	Unit Rate	Est. Annual Recoverable
Non-refundable Application Fee (Construction/Project related)	1,100	\$50.00	\$55,000.00
CONSTRUCTION			
Permit Application	150	\$450.00	\$67,500

Fee Type	Estimated Quantity	Unit Rate	Est. Annual Recoverable
GENERAL			
Permit Application	230	\$275.00	\$63,250
Cash-in-lieu of Replacement Compensation Per tree / Security Deposit		\$250.00	
Permit Extension/Renewal/Transfer Fee		\$50.00	
Compliance Inspection Fee Per Inspection		\$500.00	
Estimated Total			\$185,750

Rationale: Construction related applications require up to twice the amount of time to review by staff and therefore would be charged a commensurate fee. The introduction of a nominal administration fee for application processing provides an addition means of cost recovery.

Advantage: Establishes greater equity amongst applications, and is a simplified process to distinguish between completing a project, or not completing a project.

Disadvantage: More complex permitting structure and may result in customers applying through the cheaper permit stream to avoid higher costs.

Replacement Compensation:

Option 2: No Change to appraisal methodology; reduced cash-in-lieu fee

Retain the existing methodology for replacement calculation based on best practice (aggregate caliper method) and reduce the cash-in-lieu fees to \$250 per replacement tree.

Advantage: Methodology considers the existing condition of the subject tree and reduces compensation requirements accordingly. Reduced cash-in-lieu fee may reduce the number of undesirable tree species planted and increase cash-in-lieu dollars for tree planting elsewhere within the City.

Disadvantage: Existing process uses the aggregate caliper method which is harder to understand for customers and does not provide the ability to pre-plan the number of replacements.

By-law Amendments Additional Options Considered

- **Option 1: Do nothing (no changes)**
 - The do-nothing option poses a risk, as it will retain the existing By-law and some changes identified with respect to enforcement structure and clarity to definitions will remain unchanged.

- **Option 2: Make Changes (Recommended)**
 - This option provides the opportunity to make the necessary improvements identified through the lessons learned over the past year and through the analysis of the data collected.
 - **Option 3: Consider aligning the administration of the City Public Tree By-law 068-2013 and Private Tree By-law 02-2020 into one By-law**
 - The amendments to the Private Tree By-law must be prioritized. The Public Tree By-law will be reviewed in 2023 to align it more closely with the Private Tree By-law.
-

Financial Matters:

For 2022, the total expenditures to administer the Forest Protection branch within the Forestry section is budgeted at \$612,750. Revenues are budgeted at \$300,000 for a 49% recovery ratio with the balance (51%) being tax supported

Total Financial Impact

The recommended options within this report has the following operating budget impact:

Table 9: 2022 Budgeted Expenditures with estimated recoveries

Total Program Expenditures	\$ 612,750
By-law Recoveries (Option 1)	\$ 186,250
Total Tax Levy Support	\$ 426,500 (70% tax levy supported)

Source of Funding

The source of funding for the administration of the Private Tree By-Law Program is the operating budget and the 2022 budget amount for the program is \$312,000 (50% tax levy supported). The recommended fee structure would have a budget impact of \$113,750 or a tax impact of 0.061%

Other Resource Impacts

It should be noted that nearly one (1) FTE is currently providing inter-departmental support, where by-law requirements need to be followed (e.g., demolitions) and where others require assistance of subject matter experts (e.g., property standards hazard tree reviews). In both instances, staff are supporting forest protection efforts across the corporation. This equates to approximately \$135,000 of funding that could be sourced elsewhere

Climate Implications

Trees contribute towards the City's climate change goals both through their role in climate mitigation, sequestering carbon, adaptation by reducing the heat island effect, promoting infiltration and interception of rainwater, and improving air quality. Trees also improve the overall environment through their aesthetic qualities, providing habitat, reducing noise pollution, contributing to stress reduction, as well as screening and privacy. These benefits accrue to both private properties and the community at large.

Engagement Matters:

Forestry staff have engaged with several internal and external stakeholders over the last year. Given the topics were directly related, discussions on the development of a Corporate Tree Protection and Enhancement Policy, as well as improvements to the Private Tree Bylaw were completed concurrently. Some engagement highlights from the last year include:

Table 10: Engagement summary

Consultation Type	Date
Internal Stakeholder: Discussion on guiding principles on corporate protection & enhancement policy	September 8, 2021 September 24, 2021
Community PIC: Discussion on guiding principles on corporate protection & enhancement policy	October 28, 2021
Online Survey hosted on get involved Burlington webpage	October 21 to November 12, 2021
Council Workshop: Discussion on corporate protection and enhancement policy and Private Tree By-law	November 22, 2021
Follow up questions published to 'Get Involved Burling web page	December 10, 2021
Internal Stakeholder: Discussion on corporate protection & enhancement policy	December 14, 2021 January 5, 2022
Feedback Sessions with individual Councillors and Mayor	Jan 2022 (ongoing)

In addition, staff have consulted extensively with legal services on potential bylaw changes, as well as members of ITS, CX, Planning, Site Engineering, and Finance on items related to process improvement initiatives and customer experience.

Conclusion:

Through the comprehensive review and refinement of the current bylaw, applicable processes, and associated permit fee structure, staff have improved the Private Tree By-law to be simpler and more streamlined, that is equitable for residents and businesses alike. The refinement of the Private Tree By-law over the last two years has sought to strike a balance between respecting individual property rights, while having a mechanism to preserve, protect, and grow a critical community resource with a 'made in Burlington' solution.

Respectfully submitted,

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Report Approval:

All reports are reviewed and/or approved by Department Director, the Chief Financial Officer and the Executive Director of Legal Services & Corporation Counsel.