



Report to Committee

DATE: June 9, 2017

To: Finance and Intergovernmental Committee

FROM: The Tree Regulation and Policy Review Team

SUBJECT: **COMPREHENSIVE REVIEW OF POLICIES, REGULATIONS AND MANAGEMENT PRACTICES RELATED TO TREES IN THE CITY OF PORT COQUITLAM**

EXECUTIVE SUMMARY

The City of Port Coquitlam highly values its trees for their environmental, aesthetic and shading benefits. The City promotes the planting of on-site and street trees at the time of major developments; works with home owners and developers to protect trees through its administration of the Tree Bylaw and implementation of Watercourse and Conservation Area Development Permit Area designations; and, sets policies to guide both tree protection and tree planting in its Official Community Plan. It has also endorsed environmental and heritage strategic plans that provide further guidance on matters such as recognition of heritage trees and measures to enhance environmental sustainability.

The 2017 Business Plans for the Parks Division (Engineering & Public Works Department) and the Planning Division (Development Services Department) include a comprehensive review of policies and regulations applicable to trees to be undertaken as a joint project between the two divisions. This review is intended to respond to emerging community concerns with respect to trees and ensure that our policies and regulations are updated to reflect community objectives and best practices.

The underlying approach being suggested in this report is for the City to set a tree canopy target that reflects the community's goals with respect to tree canopy cover. An assessment of the current canopy reveals it is 23.8% but will start to decline unless changes are made to retain more trees and increase the number being planted in the community. Two scenarios for a target are put forward for discussion: (1) maintain canopy coverage ("no net loss") and (2) enhance canopy coverage. Achieving a no net loss target would involve reducing the number of trees being cut and modest increases to the number being planted; achieving an enhance target of 25% would involve not only reducing the number of trees being cut, but also more substantial increases in the numbers being planted.

The amendments to our existing policies and regulations should align with the tree canopy target, once selected, and the Tree Regulation and Policy Review Team suggests this target be determined with input from the community. An inclusive and innovative community consultation program is proposed to provide for this input, as well as feedback on possible changes to our current policies and bylaws that would be associated with achieving the selected target. It is anticipated that this work would proceed over the summer and early fall for a report back to Committee, with recommendations, by late fall.

RECOMMENDATION

That staff be authorized to consult with the public on ideas to change the City's policies and bylaws related to planting and protection of trees within the City.

1 BACKGROUND

- 1.1 **Purpose and Scope:** The City of Port Coquitlam, "surrounded by rivers, connected by trails", has highly valued forested landscapes framing these amenities. Within built-up areas, mature trees in parks, on private lots and along streets further define the urban landscape. Originally, the land would have been entirely forested but, as the City grew and lands became more intensively used for roads, buildings, parking lots and active parks, there has been an associated loss of the natural forest and its replacement with development, including urban landscaping.

The community values its trees not only for their beauty and shade, but also for their contribution to the environment. The City has developed a number of policies, regulations and management practices that apply to the planting, protection and maintenance of trees on both public and private lands. However, there has been increasing concern expressed by some members of the community that the City with respect to how it manages trees and that decisions related to trees need to better reflect community goals and objectives.

The 2017/18 Business Plans for the Parks and Planning Divisions call for a comprehensive review of current policies, regulations and management practices related to trees. The members of the Tree Regulation and Policy Review Team include Parks Division staff (Todd Gross, Chris Pardek and Rob Landucci) and Planning Division staff (Jennifer Little and Neil MacEachern).

This review is intended to:

- evaluate potential changes that could be taken to better meet community objectives;
- respond to concerns raised by members of PoCo Heritage Trees, with respect to how the City recognizes and protects significant and heritage trees;
- respond to concerns with respect to tree cutting approval processes associated with the new community recreation complex and the cutting of other public trees; and,
- address policy and regulatory gaps identified by staff to ensure they reflect current legislative authorities and set administrative fees and charges that are in line with both community objectives and cost recovery policies.

2 CURRENT POLICIES AND REGULATIONS

This section summarizes the provincial legislation that establishes the City's authority to regulate trees and outlines the various municipal policies and regulations which currently apply to the City's protection, planting requirements and management of trees.

- 2.1 **Provincial Legislation:** The *Community Charter* and the *Local Government Act* establish the City's authority to regulate removal and replacement of trees. The West Coast Environmental Law Society summarizes this authority as, "*Municipalities have broad authority to regulate and*

prohibit the cutting of trees and to promote the development of the urban forest. This includes requiring that trees be replaced, and can apply to different areas of the municipality and types of trees. The municipality can designate significant trees, and require that an owner obtain a permit before cutting trees. However, a tree protection bylaw cannot prohibit all uses permitted under the zoning bylaw and cannot prevent development to the density permitted under a zoning bylaw, unless compensation is paid.”

2.2 Municipal Policies and Regulations:

- (1) **Environmental Strategic Plan:** The Plan, endorsed by Council in 2011, defines two strategic directions: one, to protect and manage the urban forest; and two, to protect existing small-scale (treed) habitats and create new habitats in new developments. Implementation recommendations of this Plan include: developing an urban forest management program, preparing a street tree inventory, adopting regulations to require tree replacement and developing a tree planting program which includes habitat-friendly tree species.
- (2) **Official Community Plan (OCP):** Policies in the Plan related to trees include:
 - Environmental policies promoting preservation and planting of trees
 - Road network policies promoting street trees when the City undertakes road construction
 - Design policies encouraging integration of trees within the streetscape and including trees in new developments.
- (3) **Development Permit Area Designations:** The objectives and guidelines pertaining to trees within areas designated in the Official Community Plan as development permit (DP) areas include:
 - a) Form & Character DPs (apply to multi-family, commercial, industrial development): trees are to maximize shading in surface parking areas; stormwater management plans are to incorporate drought-tolerant and indigenous trees; and trees are to be used for screening;
 - b) Watercourse Protection DPs (applies to the defined riparian area next to watercourses): requires retention of mature and significant trees; replanted trees must be 50% coniferous; sets out guidelines to maintain planted trees;
 - c) DPs for Protection of the Natural Environment (applies to steeply sloping areas): encourages tree retention and planting; and,
 - d) Environmental Conservation Area DPs (applies to all new buildings other than single family/duplex): trees are to be provided in surface parking areas.
- (4) **Tree Bylaw:** This Bylaw sets out requirements to allow for and regulate the cutting of trees. It applies to all trees with a diameter larger than 20 cm (7.9”) measured at 1.4m above the ground. The bylaw sets out procedures and fees for permit issuance and exempts owners from being required to pay a fee to cut one tree per lot per year. It further defines significant trees to include large native species, wildlife trees (used for bird nesting), heritage trees (trees that have been registered by size, age or cultural significance in a heritage registry) and specimen trees (unusual trees as determined by a certified arborist) and, if cut, requires a significant tree to be replaced. Permits to remove significant trees are restricted to new buildings, additions to buildings, driveways, parking spaces or services.

- (5) **Subdivision Servicing Bylaw/Parking and Management of Development Bylaw:** These bylaws require the planting of street trees as part of the offsite works (curb and gutter, sidewalks, ½ road reconstruction) at the time of subdivision for subdivisions creating more than 3 lots and at the time of building permit issuance for new buildings. These requirements do not apply to the construction of single residences and duplexes in areas designated in the OCP to remain developed as low density residential neighbourhoods.
- (6) **Heritage Strategic Plan & Heritage Resource Inventory:** The policies of the Strategic Plan look to achieve improved environmental protection for significant natural and cultural landscapes (including trees); the Inventory identifies a number of trees considered to have heritage significance within the community.
- (7) **Boulevard Maintenance Bylaw:** This Bylaw provides for the protection of trees on boulevards.
- (8) **Parks and Facilities Bylaw:** This Bylaw forbids unauthorized signage or decoration of trees in parks.
- (9) **Vector Control Bylaw:** This Bylaw requires control of invasive species in the city, including trees.
- (10) **Zoning Bylaw:** This Bylaw requires screening of parking and loading areas (including trees) and buffers between adjacent uses in specified zones for new development.

3 PORT COQUITLAM'S TREES & TREE CANOPY

3.1 Benefits and Costs: The City's urban forest is comprised of the trees growing throughout the community, including the variety of tree species planted on privately-owned properties, native trees, street trees, and trees in parks and natural areas. The challenge of any municipality is to balance competing and conflicting interests and to identify an urban forest management plan which allows community to reap the benefits of trees and looks to mitigate negative impacts where possible.

In summary, the benefits of trees include:

- environmental benefits of stormwater management, residential water conservation, urban thermal regulation, air and water pollution absorption, carbon sequestration, and wildlife habitat
- benefits from a social perspective including residents' improved physical and mental health, lower crime rates, fewer traffic incidents, and noise dampening; mature street trees can substantially reduce the impacts of inhospitable, wide roads.
- economic benefits such as higher property values, tourism (in forested parks), and reduced road and storm sewer infrastructure costs.

Trees in an urban environment can also be perceived as being nuisances. Issues arise if the tree is the wrong species for its location or it is improperly pruned (for example, topped trees are particularly vulnerable to failure). Tree roots can impact and damage infrastructure and buildings, leaves and branches can impede views and be restricted by infrastructure such as overhead services, there may be areas where shade is not desired, and trees can create habitat and food for bears and rodents. Dropped leaves, fruits and needles can be an inconvenience to property and

business owners and may clog catch basins if not removed in a timely manner. With climate change, the frequency and severity of storms is increasing and tree failure can be a major cause of damage and injury.

Private trees are the responsibility of the property owner and if the tree an owner wishes to remove meets the significant tree guidelines in the bylaw, the owner is required to supply an arborist report from a qualified arborist to support the removal. This process ensures the City addresses concerns related to potential liability related to restrictions on tree cutting.

- 3.2 Trees in Port Coquitlam:** There are approximately 5.6 million trees in the City with roughly 55% growing on privately-owned lands and 45% on public lands (parks, natural areas along rivers and streams, trails, schools, streets and other rights-of-way)¹. Approximately 4,700 trees located within active parks or along streets are actively managed by the City. The City's 2017 budget to ensure the ongoing health and safety of public trees is \$460,000 for programs which include watering, pruning, risk assessments, and removal when necessary.

Overall, the estimated net loss of trees per year ranges from 50 to 1500 trees, with higher losses if large sites are cleared for development. Between 500 and 2000 trees are cut under permits and their loss is only partially offset by the planting of new trees: the City adds between 50 and 300 new trees per year in its streets and in parks, with the number depending on available funding derived from the tree cutting permit fees; developers will typically plant between 50 and 150 street trees per year in addition to those included in on-site landscaping. The total number of trees planted on private lands annually is unknown, but observations indicate it is insignificant outside of new developments.

- 3.3 Tree Canopy and Canopy Targets:** A tree's canopy is defined as the area that falls underneath a tree's leaf and branch cover and canopy coverage is the relative amount of land which is within this canopy. Canopy cover level is a strong indicator of tree rainfall interception, thermal regulation, pollution absorption and perceived greenness of a City, and a moderate indicator of other tree services. A higher level of canopy cover is therefore associated with greater social and environmental benefit.

An identification of the City's canopy coverage was undertaken as part of this review to assist in developing an understanding of the value of the urban forest. An assessment of the canopy cover level using the USDA i-Tree tool for the years from 2004 to 2016 indicates the City's coverage has remained steady at 23.8%. Note: the USDA i-Tree tool used to evaluate canopy density does not distinguish between deciduous versus coniferous trees, or the height of trees. It also does not translate into an estimate of the number of trees in an area as this will vary depending on the individual crown size.

An analysis of the tree cover by different land uses between 2004 and 2016 reveals there has been significant variation in the growth and decline of canopy cover with the amount of variation related to the land use. In general, canopy cover has increased on public lands and in ground-

¹ This number is based on a calculation using the USDA i-Tree tool as further described in Section 3.3. It assumes an average tree crown is a medium-sized (9m diameter) tree.

oriented residential development (single family, duplexes, townhouses). This increase is primarily due to a widening of tree crowns in growing trees as the actual number of trees in this type of land use declined over the 12-year period.

The canopy cover in areas developed for other land uses, including apartment, commercial, agricultural, industrial and institutional areas decreased in the 12-year period. This decrease is largely attributed to the clearing and development of previously forested sites, with the recent commercial and industrial developments in the Dominion Triangle being a major change. There has also been a loss of tree canopy in apartment-designated areas close to the downtown and north side commercial centres. When apartments replace older, small homes on large lots, mature vegetation is typically removed and the site cleared to its lot lines to accommodate the building and its underground parking structure.

Table 1: Estimated Canopy Cover Level by Land Use within the City's Developed Areas²

Use	Area (km ²)	Canopy Cover		
		2004	2016	Change
Ground-Oriented Res'l	7.62	22.1%	23.0%	+0.9%
Roads & Rights-of-Way	4.85	14.9%	17.5%	+2.6%
Industrial (not CP Rail)	2.61	7.3%	5.1%	-2.3%
Parks	2.21	72.7%	73.6%	+0.9%
Vacant	2.08	43.1%	35.3%	-7.8%
Institutional	1.32	26.5%	25.5%	-1.0%
Commercial	0.75	16.7%	10.4%	-6.3%
Apartment	0.53	30.8%	25.6%	-5.1%
Total	21.98	23.8%	23.8%	0.0%

Predicting the City's future canopy level involves inherent uncertainty and assumptions. In general, the 12-year trend indicates there has been minimal change, and projecting that trend in the future suggests there could be either a slight decrease or a slight increase in the canopy. This outcome will depend on how quickly land is redeveloped and the amount of forested land area that is included within this redevelopment. Another factor will be the age of development. When younger trees reach maturity within areas where there was extensive replanting of trees over a relatively short period of time, such as in Citadel Heights, the canopy growth being experienced over the last decade substantially increased. However, this increase will not be sustained as the trees reach maturity or if residents seek to reduce shading or enhance their views by cutting trees, resulting in a significant loss in the total number of trees.

² This table provides a calculation of trees within the City's Urban Containment Boundary as defined in the Official Community Plan. The calculation generally considered the zoning of properties to be an indicator of current land use. Ground-oriented residential uses includes lands zoned single residential, duplex and townhouse; vacant lands includes lands zoned Agriculture but not in the Agriculture Land Reserve and designated in the OCP for future development.

Three Lower Mainland communities have set targets for the amount of tree canopy they wish to see in their communities: New Westminster is aiming for an absolute canopy increase from its existing canopy of 18% to a total of 27% by 2035; Vancouver is looking for a 4% increase to 22% by 2050, and Surrey’s target is for a 12.3% increase from 27.7% to 40% by 2058. **Error! Reference source not found..**

Port Coquitlam’s canopy cover is higher than the more intensely-developed communities of New Westminster and Vancouver and lower than that of the City of Surrey, which has a large rural area. The City of Toronto has a higher canopy cover of 28%, similar to other older cities which have a greater proportion of large mature trees.

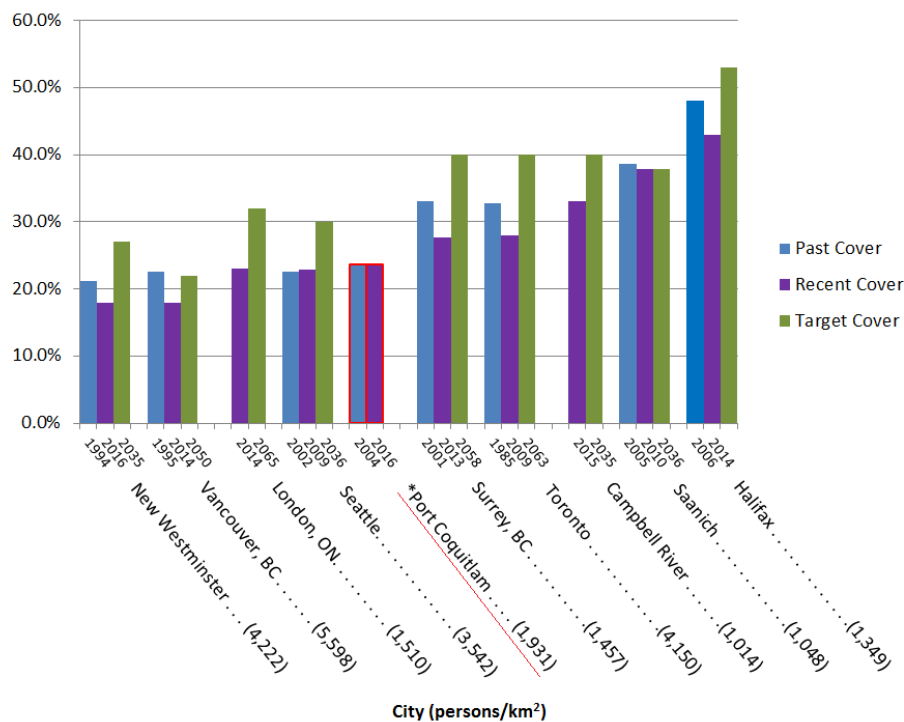


Figure 1: Canopy Cover and Targets for Select Cities

Setting a target for the City of Port Coquitlam is suggested to serve as an overall guide to how we set our policies and regulations and manage our urban tree forest. Two scenarios are suggested for discussion:

- (1) A no net loss scenario whereby the City would take steps to maintain the existing tree canopy cover of 23.8%; or,
- (2) An enhanced canopy target of 25%.

Selection of a no net loss target in canopy cover may be achievable if the City amends existing regulations to increase protection of existing trees to reduce cutting and lower the potential for a decline in cover, while maintaining and enhancing its existing planting programs.

To achieve an enhanced canopy target of 25%, additional trees would need to be planted along with the reduction in the cutting of trees. This scenario would equate to planting an additional 13,000 small trees (5m diameter crown at maturity), or 4,000 medium-sized trees (9m crown) or 1,250 large trees (18m crown) over a 25-year period, an average annual net gain of 160 medium or 515 small trees. This would require both the City to increase the number of trees it plants and the private sector to plant more trees. Realistically, the trees that could be planted would be a mix of small and medium sized trees.

The Team reviewed two higher targets to assess their potential feasibility. A canopy target of 27.1% would require a substantial increase in trees planted along streets and in other public lands as well as reduced cutting of trees. This scenario involves planting an additional 35,000 small trees, or 11,000 medium-sized trees or 3,500 large trees over a 25-year period, or an average annual net gain of 440 medium or 1400 small -sized trees. The primary impact would be the need for additional funding for the City to plant trees. An aspirational target cover level of 30.7% was also explored. This target is based on an approximation of science-based target canopy covers developed by American Forests for different land use typologies. Achieving this target would require substantial increases of tree canopy not only in ground-oriented residential areas and public lands but also in industrial and commercial areas, and would equate to the addition of 78,000 small trees, 24,000 medium-sized trees or 7,600 large trees. Over a 25-year period, this would require an annual net gain of 960 medium-sized trees and could only be achieved if there was a significant investment from the private sector responding to a significant shift in policy and regulations. To implement the latter scenario, developed sites would need to be reconfigured to replace their surface parking lots or informal storage areas with trees and new developments would be required to provide a significantly higher number of trees than currently achieved (at least two to one for each tree cut) in addition to substantial increases in street trees. Such a significant shift is not seen as feasible.

4 IDEAS TO ENHANCE PROTECTION, PLANTING AND MANAGEMENT OF TREES

- 4.1 **Current Policies and Regulations.** Based on the assessment indicating the City needs to amend current policies, regulations and practices if it is to achieve either a no net loss canopy target or one that enhances the coverage, this section brings forward a number of ideas that would enhance protection of trees, increase planting of new trees, and better manage our trees. This section also addresses various tree-related issues that have been brought to staff's attention over time and brings forward ideas to update our regulations and respond to identified issues.

The protection and planting of trees is currently achieved by two primary mechanisms:

- (1) the requirements in the Official Community Plan for property owners to comply with environmental protection objectives in watercourse and other environmentally sensitive areas; and,
- (2) the requirement of the Tree Bylaw that a property owner must obtain a tree cutting permit and pay a fee for the permit, if required, prior to cutting. This regulation serves as a deterrent to tree cutting, especially for significant trees. Furthermore, if a significant tree is cut it must be replaced.

The implementation of Council’s policy to protect trees in environmentally-sensitive areas through the designation of areas as development permit areas has proven to be highly effective in ensuring that trees within these areas are protected from the impacts of new development or, if removed, that they are replaced. A policy gap has been identified with respect to the protection of trees on a development site where trees may be saved if it is possible to vary building siting or other regulations such as parking requirements.

The Tree Bylaw effectively regulates cutting of significant trees and serves as a mechanism to obtain funding for planting new trees through the permit issuance process. However, it is not an effective mechanism to prevent the cutting of trees. While the mechanisms in place help ensure trees are only cut after a review process, there are limited mechanisms in place to prohibit or otherwise reduce the number of trees being cut. If the community wishes to retain or enhance its canopy cover, then amendments to the Bylaw may be needed to reduce the number of trees being cut on private lands.

The following table compares the provisions of the City’s Tree Bylaw with measures in place in other Lower Mainland communities:

Port Coquitlam	Other Communities
Exempts requirement for a permit to allow for cutting of one tree per year	No exemption provided in Maple Ridge, Vancouver, Surrey, White Rock, Richmond, New Westminster, Port Moody, and Delta (where fee is waived but replacement required).
Regulates trees that are less than or equal to 20cm diameter at 1.4m height	The following communities apply tree cutting regulations to trees smaller than Port Coquitlam’s requirement: DNV ³ (10cm at 1.3m), Port Moody (10cm at 1.4m), New Westminster (20cm at 1.3m), Maple Ridge (20cm at 1.3m), and Coquitlam (20cm at 1.4m, or 5m on slopes $\geq 20^\circ$)
Requires 1 to 1 tree replacement for the cutting of a significant tree only	1 to 1 replacement of all cut trees is required in Burnaby, DNV, Maple Ridge, Richmond, West Vancouver with higher requirements in Burnaby of up to 3 to 1 and, in Maple Ridge and White Rock, of up to 6 to 1 (depending on the size of tree being cut); in DNV replacement of up to 3 to 1 depends on lot size; in Surrey, Delta and New Westminster the requirement is 2 to 1 with a reduction to 1 to 1 in New Westminster for hazard trees and in Surrey for cottonwood or alder trees.
Current fees: Single-family lot: \$50 application fee plus \$20 per tree; Multi-family, commercial, industrial lots: \$75 application fee plus \$25 per tree	Burnaby: \$76/tree for no development, \$162/tree for single residential, \$1,295 to \$3,236 base fee plus \$162/tree for large developments; Coquitlam: \$53.50 per permit; Delta: \$50 per permit plus \$125 per tree; DNV: \$76/tree up to 5 trees, \$359 for 5+ trees, \$1,860 for 10 or more in 1+ ha parcel; Port Moody: \$205 per single residential permit, \$550 other; Surrey: \$79 per permit plus \$31/tree; \$104 to \$509 for single family subdivisions (size/zone dependent); \$509 per acre for other; White Rock: \$150 per permit;

³ DNV = District of North Vancouver

Port Coquitlam	Other Communities
	New Westminster: \$75 per permit plus \$75/tree (up to 10), \$150/tree over 10 trees
Cash in lieu of replanting is not set out in the bylaw	Maple Ridge charges \$425; New Westminster \$500; Burnaby \$525; DNV \$538.40; Surrey \$400 for 5cm diameter replacement, \$800 for 8cm replacement;
Authorization for works adjacent to trees is not required	Authorization is required in Richmond, Surrey, New Westminster, Vancouver, DNV, Port Moody, West Vancouver
Requires arborist's report for permit on case-by-case basis (generally only where trees are to be retained through development process or if large block is to be cut)	Arborist's report required for any cutting in DNV, New Westminster, Port Moody, Vancouver, West Vancouver Arborist's report required for cutting if >5 trees required in Maple Ridge and Surrey

4.2 TREE PROTECTION IDEAS

The following changes to better protect trees are suggested for public discussion.

(1) ***That the Tree Bylaw be amended:***

- a) *Eliminate the single tree/15% of stems exemption:* It is suggested that the City eliminate the Bylaw's current provision to not charge property owners a permit fee to cut one tree annually (or up to 15% of total trees on a parcel) as a measure to promote tree retention. The waiver for cutting a danger (immediately hazardous) tree would be retained to address potential safety issues, and a permit would still be required.
- b) *Apply to smaller-sized trees:* Currently, the Tree Bylaw regulates trees larger than 20cm in diameter at a height of 1.4m, resulting in an exclusion of trees with narrower stems regardless of their age, height, or crown size. This allows for many smaller trees to be cut without restriction and is a size that is larger than that applied by many other communities. It is suggested that the bylaw be amended to the definition of a merchantable tree in BC, which means it would reduce the minimum diameter for protection to 15cm at a height of 1.3m and to include a minimum height of 4m.
- c) *Improve the protection of trees to be retained that are potentially impacted by adjacent works:* The Tree Bylaw prohibits conducting earth works such as excavation or soil deposition under the branch area (dripline) of a tree. However, no permit is required for this type of work unless it is a significant amount, which results in difficulty in tracking and enforcing bylaw requirements. Furthermore, the area required to be protected is insufficient. It is suggested that a tree protection permit for any works within one tree length of a tree be required and that a protective barrier measured to be 1.5 times the tree crown diameter be constructed on the work site. It is further proposed that tree protection be exempt from fee requirements to encourage compliance and achieve the desired retention. The additional cost to the developer is expected to be marginal, although it may require more careful planning and execution of the work.

- d) *Define penalties for Bylaw contravention:* The Tree Bylaw provides that penalties for contravention are not to exceed the maximum allowable under the *Offence Act*, however this Act does not define the amounts that can be levied as fines, complicating enforcement and reducing the potential deterrent effect. Other tree bylaws in the Lower Mainland typically specify penalties of not less than \$1,000, up to \$10,000 per offence, and it is suggested that this penalty be added to the Tree Bylaw.
 - e) *Increase the permit fee:* The overall impact of the suggested changes on administrative costs for issuance of a tree permit would be minor. However, our current fee is relatively low and it is suggested that the price of a permit be increased from \$50 to \$100 to capture processing costs.
 - f) *Not change the bylaw to require an arborist's report:* The bylaw currently provides that the City may request an arborist's report prior to issuance of a permit and this is generally the case if the proposal involves a large number of trees, there are choices related to which trees are to be retained in a development, or if a site is subject to a watercourse development permit. The process is considered to work well for the City as it provides for the professional input when required for a site's development and does not impose unnecessary costs (According to local arborists, imposing a bylaw requirement that a report be obtained would add an estimated additional cost to obtain a tree permit ranging from \$100 up to \$600 per tree being assessed).
 - g) *Take a security for tree replacement.* Where a tree is replaced, it is suggested that the bylaw provide that a security be held for a minimum of one year after planting to ensure that the replacement tree is established.
- (2) ***That OCP Policies be augmented to address policy gaps and add the tree canopy target:*** The effectiveness of the City's landscape requirements for multi-family, commercial and industrial developments is seen throughout the community as new developments are required to provide high quality and effective landscaping, including landscape screens between different land uses and planting of trees to provide shade in parking areas. For this reason, no changes are being suggested to how the City applies its development permit area designations. However, to respond to the identified policy gap with respect to measures that can be taken by the City to enhance tree protection, it is suggested that a new policy be included in the OCP update to indicate that the City would support variances to siting and parking regulations if the variance results in enhanced tree protection. In addition, the setting of a tree canopy target as a policy should be included as part of the OCP update.
- (3) ***That steps be taken to identify and implement measures to better recognize and protect significant trees, including heritage trees:*** While the classification of trees as significant in the Tree Bylaw affords a level of protection, it does not prevent tree cutting if a tree stands in the way of a new development or infrastructure. It also does not provide for enhanced recognition. This could result in the loss of culturally-significant or important specimen trees in situations where measures may be taken for their retention. It is suggested that the public consultation process specifically provide for consideration of how the City may take steps to identify trees valued for heritage or other unique qualities along with the development of specific measures to protect these trees.

- (4) **Financial Incentives:** Offering incentives for homeowners to retain large trees on their properties such as through tax reductions.

4.3 TREE PLANTING IDEAS

Most new trees are planted by the City on public lands or by the property owner on private lands at the time of a new development. The City collects limited funding from tree cutting permits and this funding is used to pay for the planting of new trees by the City. In addition, trees are planted as part of public work projects when feasible and part of the scope of work or pursuant to a project-specific capital fund. The past practice has been that the City plants most of its new trees in parks or along streets developed with curbs.

Most trees gained through the development process are associated with new multi-family, commercial and industrial buildings pursuant to the development permit area designation's landscape requirements. In addition, the OCP requires new dwellings within the RS4 zone to include a minimum of two trees per lot and the recently adopted regulations for coach houses require that the residential lot include least two trees. Recent subdivisions approved through the rezoning process have a similar requirement being imposed as a condition of approval. However, these measures are being applied on an ad hoc basis as we currently do not have any applicable policy for this type of development.

Achieving an enhanced tree canopy relies strongly on having more public trees planted in the boulevard (the area between the paved portion of the street and the private lot line) and to do so generally requires that a curb be in place to protect the trees from the potential impact of vehicles. While historically planting of new trees has focused on planting along streets with sidewalks, there is opportunity to add trees in those boulevards which have curb and gutter but no sidewalks. It is estimated these types of areas could accommodate a total of 2000-2500 trees. However, the City would need to fund curb and gutter installations if it looks to plant beyond these in its boulevards, and placing them in this location may prohibit sidewalk installations in the future. The current street renewal program does not provide for this type of additional infrastructure and costs associated with this type of planting are projected to be substantial. Prices vary, but improving the road edge with curb and gutter for the purpose of planting trees and spacing trees 15 metres apart would be approximately \$12,000 for an average block with a 130m length. This cost would be increased if root barriers are also required and the amount for barriers can vary substantially depending on the location, tree size, and other factors. In addition to the cost of planting trees, the City must also adequately budget to maintain its trees.

The following ideas to enhance tree planting are proposed for discussion with the public:

- (1) ***That either the planting of an appropriate replacement tree or sufficient funds be required to pay for its replacement; that the replacement requirement apply to each cut tree:*** It is suggested that the City's current requirement to replace significant trees be expanded to apply to all cut trees. It is further suggested that if an owner wishes to provide cash in lieu of on-site planting, then the amount set in the bylaw be sufficient to cover the City's estimated cost of \$500 to establish a new tree.

- (2) ***That two trees be planted for each tree cut or a corresponding cash-in-lieu.*** The City could require property owners to plant two trees for each one cut, a measure that has been taken by several other communities to increase the number of new trees being planted.
- (3) ***That the possibility of requiring street trees for single family homes be reviewed.*** The City requires street trees as part of its off-site improvements (curb and gutter installation, 1/2 road reconstruction, sidewalks and street trees) for all new multi-family, commercial, industrial, and institutional buildings and for subdivisions creating three or more lots. It does not impose this requirement on new single family residences or duplexes, unless they are located in an area designated for higher density townhouse, apartment or non-residential use. It is suggested that the upcoming review of the Subdivision Servicing Bylaw include consideration of whether or not the City wishes to extend its requirements for street trees to apply to the time of construction of any new single family home, duplex, and as an additional option, to large additions to existing buildings. The discussion should address the challenge of implementing off-site requirements on an individual lot basis and options to provide for future works or latecomer's agreements to pay for works if off-sites are to be required for single lots.
- (4) ***That planting additional trees on privately-owned lands be promoted:*** While homeowners generally plant trees in accordance with their own personal goals, the City could take steps to promote more homeowners choosing to plant trees and reduce areas where trees cannot be grown. ideas include:
 - a. Amending development regulations to reduce the amount of land which may be paved
 - b. Subsidizing saplings for residents, either via a tree giveaway, a low-cost tree sale, or a voucher to acquire a tree from a local nursery at a discount. These types of programs have historically been successful, with Vancouver's tree sale being oversubscribed in most years, and tracking of trees given away in US cities has shown 70% to 80% survival after 5 years. The cost of subsidized trees would range from \$20 to \$100 per tree, depending on program and type and size of sapling.
 - c. Involving School District #43 or environmental groups in promoting planting. For example, in Calgary each grade 1 student receives a tree seedling to be planted at home, a program which would cost \$3 to \$10 per tree and a total budget of \$2000 to \$6000 to the City. Assuming even a 10% survival rate, such a program could add 50 trees per year to the city, at a cost of \$35 to \$115 per established tree. The added benefit of this idea is that it provides an opportunity to engage with youth and stakeholders regarding trees and their value to the community.
- (5) ***That a planting guide be developed:*** The City needs to set criteria in place to ensure only the right tree is planted in the right place by issuing a tree selection list and tree planting guide and providing direct education to property owners of properties that include, or are suggested to include, trees. This proposal recognizes that different types of trees are appropriate for different conditions (e.g. low-growing species if there is overhead wiring, trees with limited roots if there is limited space, trees appropriate for conditions related to proximity to building foundations, water table depth, neighbourhood character, and other factors. The estimated cost to implement this proposal is \$5000, including additional staff resources and communication materials.

4.4 TREE MANAGEMENT IDEAS

Updating and enhancing the City's tree management practices recognizes that it is critical for the City to minimize its potential liability, set objectives for how we wish to involve the public involvement in decisions related to tree cutting, and implement other measure to enhance tree management.

- (1) ***That Municipal Tree Procedures be established:*** The purpose of establishing a procedure manual would be to provide guidelines for City staff and inform the public. It could include the following information:
 - a. measures to protect public trees potentially impacted by a construction process (including street trees)
 - b. assessment criteria with respect to what constitutes a hazard tree or nuisance tree
 - c. evaluation criteria for commemorative tree planting
 - d. guidelines to respond to requests for tree cutting or pruning to enhance views, and
 - e. notification or other measures to be taken prior to cutting trees on public lands.
- (2) ***That the City implement an Inventory and Tracking Process:*** The City tracks street trees and trees in active park areas, but not on private lands. Introduction of a process to monitor and track all trees is suggested to help manage and ensure a healthy tree species diversity in the City. Staff will monitor emerging technologies to ensure that the appropriate steps are taken to track trees within the community and evaluate how we are meeting the selected canopy target.
- (3) ***That a specimen and heritage tree program be developed:*** In the Tree Bylaw, specimen and heritage trees are included in the class of significant trees, however with the exception of the work undertaken as part of the heritage inventory, no formal process has been implemented to identify these types of trees. Concern has been expressed by the Heritage Tree Group members and other community members that the City needs to better identify and protect these types of trees. To address this concern, it is suggested that a focused review be included as part of the public consultation process to define candidate specimen and heritage trees, identify what type of trees should be listed for exceptional protection and determine how such protection may be achieved.
- (4) ***That a maintenance guide be developed for the public:*** It is suggested that the City provide information to ensure trees are watered, fertilized and correctly pruned.
- (5) ***That public information be developed:*** It is suggested that the City use social media, brochures, celebrations, enhanced mapping to better inform the public about trees.
- (6) ***That review and inspection procedures be formalized:*** Current processes to oversee tree planting in new developments involve the review of landscape plans submitted for a development permit in multi-family, commercial and industrial areas by staff in the Parks Division and inspections prior to release of securities. Setting out procedures for this review process, as well as processes for inspection, is suggested to ensure the right trees are planted as part of developments and that they are appropriately maintained after being planted.

5 PUBLIC CONSULTATION

A comprehensive consultation process is suggested that not only recognizes how residents prefer to comment on projects and but also provides an opportunity to inform and engage interested residents. In general, the purpose of the consultation would be to obtain feedback on the concept of setting a canopy target and on substantial proposed regulatory and policy changes. As there is expected to be considerable community expertise and interest in this process, and it is important to ensure that residents who are away during the summer months have a chance to provide input, the following consultation process is proposed:

- (1) Posting information on the City's website to inform the community about the review of tree policies and regulations and to invite feedback through an on-line survey;
- (2) Holding one or more workshops to obtain input from stakeholders including the Heritage Tree Group, the Port Coquitlam Heritage and Cultural Society, the Burke Mountain Naturalists, the Urban Development Institute, the Maple Creek and Hyde Creek Streamkeepers groups to obtain their feedback on the ideas in this report. The intent would be to hold an initial stakeholder's workshop as early as possible (early July) and that there may be topic-specific workshops held as part of the public consultation process;
- (3) Setting up an information booth at one or more Farmer's Markets;
- (4) Hosting an Open House in early September to provide an opportunity to obtain broad community feedback.

6 OPTIONS

Committee may:

- (1) Authorize staff to consult with the public on setting a tree canopy target and ideas to change current policies and regulations as they relate to the protection, planting, and management of trees within the City; or,
- (2) Prior to supporting the recommendation to proceed with a public consultation process, Committee may
 - a. Request additional information or changes to ideas in this report, and/or
 - b. Suggest changes to the public consultation process as outlined in this report, and/or
 - c. Request staff bring forward a report with a detailed evaluation of implementation costs and benefits of each of the ideas outlined in this report prior to obtaining public input; or,
- (3) Determine that it does not wish to make any changes to current policies and regulations.

Submitted by:

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