

REPORT
Parks & Recreation Department
and
Office of the CAO

To:	Mayor Johnstone and Members of Council	Date:	June 26, 2023
From:	Dean Gibson Director of Park and Recreation	File:	2267174
	Lisa Spitale Chief Administrative Officer	Item #:	2023-419
Subject:	Response to Council Motion Re: Removal and replacement of dead and/or dying trees on City property		

RECOMMENDATION

THAT Council adopt Alternative Approach “B” to bring forward a funding proposal for consideration as part of the 2024 budget deliberations to complete a tree inventory in 2024, and implement the installation of replacement trees in an accelerated, but phased approach, over a number of years.

PURPOSE

The purpose of this report is to provide information on the implications associated with Council’s March 27, 2023 motion regarding the timely removal and replacement of dead and/ or dying trees on city-owned lands, and make a recommendation regarding a path forward.

SUMMARY

In response to the motion supported by Council on March 27, 2023, staff are providing information on the implications for removal and replacement of trees on city-owned lands with the majority of these trees residing on streets and boulevards.

The intent of Council’s motion is generally aligned with adopted plans, strategies and priorities of Council specifically as related to the Urban Forest Management Strategy,

Bold Steps for Climate Action. That being said, staff are indicating that the timing and scope of work proposed in Council's motion cannot be accommodated within existing departmental workplans for 2023 or 2024 given the current staffing and budget resources. Options exist to achieve the objectives of Council's motion either through the provision of supplemental resources; by incorporating the required work into existing workplans and undertaking the required work in smaller increments over an extended number of years; or through a hybrid approach.

BACKGROUND

On March 27, 2023 the following motion was supported by Council for further review of workplan implications, timeline and budget impacts:

WHEREAS it is a core function of our City to maintain a healthy stock of trees on public property and to have dead trees removed in a timely manner; and

WHEREAS a number of sidewalks, boulevards, and areas in the public realm have dead or dying trees that have been there for at least one year; and

WHEREAS the City is committed to keeping all of our publicly-owned trees healthy and free of disease and/or vandalism; and

WHEREAS the City may be planting a significant number of new trees as part of our capital plan.

BE IT RESOLVED that staff report back regarding the resources required and staffing implications to conduct an audit of how many dead or dying trees are on city sidewalks, boulevards and adjacent to arterials that require replacement; and

BE IT FURTHER RESOLVED that the report incorporate the estimated costs associated with the removal of all dead and/or dying trees on city-owned land and have them replanted prior to April 2024; and

BE IT FURTHER RESOLVED that upon approval of this resolution any tree on City-owned property which must be cut down to a stump will be removed and replanted within a 12 month period where feasible and in accordance with the Tree Planting Master Plan's equity lens.

As per the terms of Council Procedure Bylaw No. 6910, respecting notices of motion, any motion arising out of a notice of motion must not take effect unless the following conditions are met:

- a) The Chief Administrative Officer, in consultation with senior staff, has submitted a report within three Council meetings on the feasibility of that motion considering any budget and work plan implications including but not limited to staff capacity, financial, policy, administration, feasibility, operational, legal, etc.;
- b) Council has considered the budget and work plan implications of the motion in light of any strategic plan adopted by Council; and
- c) Council has passed a motion to authorizing the budget and work plan set out in the Chief Administrative Officer's report.

DISCUSSION

The intent of Council's motion is generally aligned with adopted plans, strategies and priorities of Council specifically as related to the Urban Forest Management Strategy, Bold Steps for Climate Action.

As part of the implementation of the Urban Forest Management Strategy, the planting of 2,200 trees in parks and open spaces is underway as per the City's Urban Reforestation and Biodiversity Enhancement Initiative, in accordance with the terms of the funding agreement with the Investing in Canada Infrastructure Program. This initiative and additional tree planting work funded by Tree Canada has focused extensively on new tree and shrub planting within parks, open spaces and natural areas over the 2022-23 period. Once complete at the end of this year, staff will be in a position to re-emphasize efforts towards the planting of trees on streets/boulevards over a seven year period (2024-2030) as per the Tree Planting Master Plan (2019). This scope of work also incorporates removals and/or replacement trees (referred to as "re & re trees"). It is important to note that given the relatively small size of the City's arboriculture staffing complement, all tree removal and planting work occurs simultaneously with ongoing operations to maintain and protect existing trees on city-owned lands.

Council Motion

A preliminary work plan to more accurately understand the scope and resourcing implications of Council's motion includes:

- A. **Inventory Verification** - Ground-truthing inventory of removed trees and updating inventory records with dead/dying trees, and locate stump removals. The Parks and Recreation Department's tree inventory indicates that approximately 800 trees have been removed from city-owned land, the majority from boulevards, for various reasons since 1999. This is an incomplete inventory and its accuracy requires further detailed verification and does not include standing dead or dying trees that do not presently pose a safety risk.
- B. **Review Tree Replanting Feasibility** - Assessment of potential tree planting conflicts with existing and planned future infrastructure such as above and below ground utilities, transportation infrastructure, development sites, etc. Over the decades, best practices in urban forest management have evolved. Feasibility review will reveal the proportion of removed tree sites that are viable for tree replanting.
- C. **Site Assessment** - Determination of appropriate replacement tree species specific to unique site-related conditions.
- D. **Data Entry** - Update/input data to GIS database.

Estimated Timeline: 6 months (estimate established based on similar recent initiative in another community within the region)

Supplemental Resources Required for Inventory Work: Qualified Consultant (1,000 hours @ \$120/hr)

Only once the inventory is updated, can staff provide an accurate timeline and cost estimate to execute the subsequent required removal and/or replacement of the trees. For reference, the historical cost to the City to supply and install new boulevard trees is \$1,250 per tree. Staff further estimate the ongoing operating cost impacts associated with the establishment of the new trees (post planting) for the first 3 years to be approximately \$180/tree.

Given the estimated magnitude of the tree replanting scope and planning and preparatory work required prior to tree planting, it is not be feasible to address all dead or dying trees on city-owned lands prior to the stated April 2024 deadline (as referenced in the motion by Council). A realistic timeframe can be determined once the inventory work is complete. In addition, given the defined growing season and best practices for timing of tree planting, it is also not feasible to commit to the future replacement of any tree removed from city-owned lands within a 12-month period. Based on best practices, staff recommend a removal and replacement target to be within a 24-month period.

The Parks and Recreation Department current resources and 2023 work plan cannot accommodate any aspects of the above initiative this year. The option to redirect existing staff and budget resources towards this initiative in 2023 is not viable given the contractual funding agreements in place with third parties for tree planting in 2023. Given both the scope of the inventory and planning work, combined with the magnitude of budget likely required to achieve the desired tree removal and re-planting outcome, staff recommend that funding for this initiative be considered as part of the 2024 (inventory work) and 2025 (tree removal and replanting work) city budget deliberations.

Alternative Approach “A”

Integration of Replacement Tree Planting and Tree Removal Activities into existing New Tree Planting and Tree Maintenance Workplans

Staff shares the Council objective of addressing the issue of dead or dying and previously removed street and boulevard trees. As the location of these trees is sporadically distributed across the city, it has been the past practice of the Parks and Recreation Department to coordinate the removal of dead or dying trees with routine scheduled block pruning regimes within a given neighbourhood, the exception being when a tree presents a public access or safety risk. The installation of replacement trees has generally been coordinated with the planting of new street trees within a given neighbourhood. This approach helps to maximize the efficiency of staff and equipment resources by focusing similarly related work tasks within geographically concentrated areas of the city saving time in both travelling to multiple worksites over the course of the day and the requisite mobilization activities at each location. The City's tree inventory is updated on an ongoing and incremental basis under this option.

This alternative approach effectively achieves the same outcome as that desired in Council's motion, albeit over a longer period of time and largely utilizing existing staff and budget resources.

Alternative Approach “B”

Conduct full tree inventory in 2024 and based on the findings, implement the

installation of replacement trees in an accelerated, but phased approach, over a number of years.

This option represents a hybrid approach that allows the City in 2024 to fully understand the magnitude and feasibility of addressing Council's tree replacement objectives and undertake requisite tree replanting work at a pace commensurate with the level of supplemental funding supported by Council through the annual budget deliberation process.

Accordingly, additional funding in the amount of approximately \$125,000 is required in 2024 to undertake the tree inventory, feasibility analysis, and planting planning work. If this approach is supported, it is recommended that Council direct staff to bring forward a funding proposal for consideration as part of the 2024 budget deliberations to undertake this work. Funding proposals for subsequent tree replanting works could then be considered in future years based on Council's preferred rate of tree replanting.

NEXT STEPS

Should Council direct staff to bring forward a funding proposal as part of the 2024 budget deliberations, staff can proceed with retaining a consultant in early 2024 and report back with a systematic tree replanting workplan (by neighbourhood) with a commensurate timeline and cost estimate for replacing all previously removed and dead/dying trees on city-owned lands.

SUSTAINABILITY IMPLICATIONS**Financial Impact**

The current five year capital plan includes annual funding totaling \$420,000 for street tree planting to support the City's climate action priorities towards targets for growing the City's robust urban forest (Bold Step #6). On an ongoing basis, staff seek supplemental third party funding from senior governments and other sources to help augment the City's resources and accelerate tree planting efforts.

As currently contemplated in the Council motion, supplemental capital funding resources in the order of approximately \$1.125M over the 2024/25 period are required (\$125,000 for tree inventory related work plus \$1,250 per tree to supply and install an estimated 800 replacement trees).

Environmental Impact

The benefits of urban trees are many, including carbon sequestration, beautification, reduction of the urban heat island effect, reduction of storm water runoff, reduction of air pollution, reduction of energy costs through increased shade over buildings, enhancement of property values, improved wildlife habitat, and climate adaptation. Additional environmental considerations include minimization of carbon emissions through a systematic approach to tree planting by neighbourhood (as per the Tree Planting Master Plan) rather than dispersing tree planting operations in various locations across the city.

OPTIONS

Options for Council's consideration include:

1. Direct staff to bring forward a funding proposal for consideration as part of the 2024 budget deliberations to achieve Council's March 27, 2023 stated tree removal and replacement objectives as outlined in this report.
2. Adopt Alternative Approach "A" to address tree removal and replacement as outlined in this report (continued integration of tree removal and replacement with new tree planting and ongoing tree maintenance).
3. Adopt Alternative Approach "B" to bring forward a funding proposal for consideration as part of the 2024 budget deliberations to complete a tree inventory in 2024, and implement the installation of replacement trees in an accelerated, but phased approach, over a number of years.
4. Provide staff with alternate direction.

Option #3 is recommended.

INTERDEPARTMENTAL LIAISON

Detailed planning for all tree installation work includes coordination between multiple City departments including Engineering, Electrical and Climate Action, Planning and Development and Finance.

CONCLUSION

The Parks & Recreation Department remains committed to protecting, enhancing and maintaining the urban forest. Subject to approval of recommendation outlined in this report, equity, efficiency and climate action work will continue to guide urban forest planning and management towards the 27% city-wide canopy cover target.

APPROVALS

This report was prepared by:

Erika Mashig, Manager – Parks & Open Space Planning, Design and Construction
Sylvain Martel, Senior Arborist

This report was approved by:

Lisa Spitale, Chief Administrative Officer
Dean Gibson, Director of Parks and Recreation