

CITY PLAN - NEW URBAN TREES

RECOMMENDATION

That the May 2, 2023, City Operations report CO01328, be received for information.

Requested Council Action	Information only		
ConnectEdmonton's Guiding Principle	ConnectEdmonton Strategic Goals		
CONNECTED This unifies our work to achieve our strategic goals.	Climate Resilience		
City Plan Values	PRESERVE.		
City Plan Big City Move(s)	Greener As We Grow	Relationship to Council's Strategic Priorities	Climate adaptation and energy transition
Corporate Business Plan	Transforming for the future		
Council Policy, Program or Project Relationships	<ul style="list-style-type: none"> Urban Forest Asset Management Plan (2022) 		
Related Council Discussions	<ul style="list-style-type: none"> CR_4027 Naturalization Procedures (2016) CR_3108 Naturalization Enhancement Options (2016) UPE0667 Landscaping Requirements for Low Density Residential Development (August 24, 2021) UPE00664 Tree Preservation on Private Property (June 14, 2022) 		

Previous Council/Committee Action

At the June 14, 2022, Urban Planning Committee meeting, the following motion was passed:

That Administration provide a report to Committee outlining options to achieve The City Plan goal of 2 million new urban trees including benefits, risks and costs of each action, including but not limited to a private tree bylaw.

At the January 31, 2023, City Council meeting, the following motion was passed:

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That Administration provide an update to Committee on Naturalization engagement, implementation and accountabilities as part of the March 21, 2023, City Operations report CO01328 City Plan - New Urban Trees.

Executive Summary

- Administration forecasts that through current initiatives, the City will reach The City Plan goal of planting two million new urban trees by 2030, which supports the City's Urban Forest Asset Management Plan target to achieve 20 per cent urban forest canopy by 2071.
- Naturalization is an integrated part of the City's tree planting strategies and will be the largest contributor to achieving The City Plan goal of planting two million new urban trees. In addition to ecological and climate change benefits that naturalization provides, these spaces allow for a greater number and variety of possible trees.
- Currently, the City encourages tree planting, retention and conservation on private land through stewardship and incentive programs, as well as through tree planting requirements regulated through Bylaw 12800 - Zoning Bylaw.
- To achieve the desired outcomes, Administration recommends increasing incentives and programs for tree planting and preservation on private lands, as well as enhancing communication with applicants to improve compliance in existing landscaping regulations.
- Administration explored options for tree preservation and protection on private land, including a private tree bylaw, which Council has the authority to pass. A private tree bylaw is not recommended.
- Administration is considering changes as part of the Zoning Bylaw Renewal Initiative to increase space for tree planting in new developments, adjust tree planting requirements for some new large scale developments and in parking lots and improve retention of existing private trees in new and infill developments.
- In 2023, Administration is focused on a citywide public engagement campaign for the Capital Planning for Greener As We Grow Project and the new Naturalization, Restoration and Reclamation Plan. This work will gather feedback from residents and stakeholder groups about how and where naturalization and tree planting is implemented, at a high level.
- Administration is also developing a new process to determine the appropriate level of public engagement, communication and education for ongoing naturalization work. The new process will include tactics and timing for each project according to an assessment of complexity and risk. This process is expected to be in place for 2024.

REPORT

Increasing Edmonton's urban tree canopy contributes to climate resilience for all Edmontonians by improving air quality, mitigating flood risks, increasing pollinator habitat, capturing carbon and reducing heat in urban locations that experience higher temperatures due to the heat island effect.

The City of Edmonton has two key goals for growing Edmonton's urban tree canopy:

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- The target in The City Plan's Big City Move, Greener As We Grow, is to plant two million new urban trees by the time the population reaches two million people.
- The Urban Forest Asset Management Plan targets 20 per cent urban forest canopy cover by 2071. Modeling suggests that in order to meet the 20 per cent urban forest canopy target by 2071, two million net new urban trees would need to be planted by 2030, in addition to current and new initiatives to grow and maintain the urban forest canopy on public and private property.

Administration predicts that through current initiatives, the City will reach The City Plan goal of planting two million new urban trees by 2030. Additional initiatives for urban tree canopy growth on public and private land are being explored, which also supports the larger target for reaching 20 per cent tree canopy by 2071. Each program, project and initiative has benefits, risks and associated costs, which are outlined in Attachment 1.

Current Programs, Projects and Initiatives

Initiatives for urban canopy growth and maintenance on public land include:

- The Capital Planning for Greener As We Grow project (2021-2023) will include a new mapping tool and a new Naturalization, Restoration and Reclamation Plan to enable the identification, selection and prioritization of public lands for naturalization and tree planting. This plan will replace the 1994 Roadways and Parks Naturalization Master Plan.
- The approved Capital profile CM-35-1000 - Greener As We Grow Tree Planting Program (2023-2030) includes \$66.8 million in funding, allocated as matching funding for the federal government's 2 Billion Trees grant of approximately \$48 million, which the City has applied for. The total funding includes planting over two million trees and shrubs in naturalized areas, boulevards and open spaces, as well as expanding the City's Root for Trees volunteer program.
- City of Edmonton Design and Construction Standards (Volume 5: Landscaping) sets the requirements for naturalization and trees planted on public land, including numbers of trees and location types within developments. These standards are reviewed every two years with input from various City departments, the development industry and utility companies. A scheduled review is currently underway. Updates will start in 2023 and continue into 2024.
- Stewardship-focused planting programs on public land enable residents, community groups and businesses to help with growing Edmonton's forest canopy.
- The City maintains an existing boulevard and open space tree inventory of approximately 385,000 trees, 2,500 hectares of natural area tree stands and 1,000 hectares of naturalized areas. New trees are added to City inventory through capital projects, new developments and to mature neighbourhoods through neighbourhood renewal, including through the creation of new boulevard or sidewalk planting spaces.
- Bylaw 18825 - Public Tree Bylaw preserves and protects trees on public land in order to maintain and grow the urban forest canopy.

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Administration focuses on stewardship and incentive options on private land to encourage tree planting, retention and conservation. EPCOR also facilitates a Low Impact Development Program that encourages installing trees and other plants on private land.

Landscaping requirements for new developments on private land exist for most zones in Bylaw 12800. The requirements include tree and shrub planting, and seed, sod or alternative ground cover. In June 2016, City Council approved updates to Bylaw 12800 to include requirements for tree planting in low density residential developments as they were not previously required. Administration is reviewing the landscaping regulations as part of the Zoning Bylaw Renewal Initiative. Potential changes may include:

- Adjusting requirements for trees for some new large-scale developments and parking areas.
- Improving retention of existing trees through incentives.

Private Tree Bylaw

Administration has explored options for tree preservation and protection on private land including a private tree bylaw, which Council has the authority to pass. There are benefits and trade-offs associated with a private tree bylaw to protect and/or preserve trees on private properties.

Potential benefits include increased tree preservation and biodiversity on private land. Trade-offs and considerations include:

- Increased fees/permits for developments.
- Increased regulatory complexity.
- Increased permit timelines and resources needed for bylaw development, implementation and enforcement.
- Challenges with effective implementation and enforcement of a permit process for tree removals.
- Potential to disincentivize residential densification, which falls out of alignment with The City Plan.

Administration does not recommend adopting a private tree bylaw and instead will focus on increasing incentives and programs for tree planting and preservation on private lands, as well as enhancing communication with applicants, such as developers, to improve compliance with existing landscaping regulations.

Potential Programs, Projects or Improvements

Administration is exploring a number of programs, projects and improvements to enhance tree planting, retention and conservation. Highlights from Attachment 1 are listed below.

- Review the City Design and Construction Standards for opportunities to increase space for trees and the number of trees required to be installed on public lands such as municipal reserves, on boulevards and along streets, in public utility lots and utility corridors.
- An implementation plan for the Urban Forest Asset Management Plan, which would support the development of programs to promote, encourage or incentivize tree preservation and planting on private land and private land urban forest canopy targets.

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- Work with other organizations to expand programs focused on low impact development and tree planting on private property including residential, commercial, industrial and institutional.
- Explore mapping out City land holdings that are of high ecological benefit and opportunities for the City to purchase high value natural areas to protect them from the effects of development.

Naturalization Implementation and Accountabilities

Volume 5: Landscaping of the City of Edmonton Design and Construction Standards apply to the capital and operational contracts of the City as well as private development projects. These standards help ensure that all infrastructure projects adhere to a standardized level of quality and that landscaping projects on public lands are constructed to be functional, visually appealing and ecologically sustainable. EPCOR and the development industry are involved in creating and updating the standards through a process led by Administration.

Trees and naturalized areas that are a part of developer, utility company or City-led capital projects are the responsibility of the project owner to install and establish. Engagement may be carried out by the organization responsible for the planning and implementing naturalization or tree planting. Design plans are reviewed and approved by the City prior to construction starting. Once these assets are approved at the Final Acceptance Certificate stage of development, they are added to City inventory and Administration becomes responsible to maintain them throughout their lifecycle. Existing spaces already maintained by the City may also undergo conversion to naturalized areas or have additional trees planted through work led by the City. Open spaces and right-of-ways that are owned by utility companies such as EPCOR, are maintained by the utility company or by the City through formal agreements.

A history of implementation of naturalization in Edmonton from the early 1990s to present day is in Attachment 2.

Budget/Financial Implications

Operating budget, capital profiles and grants are approved and available to fund projects and programs focused on expanding and renewing trees primarily on public land, with some educational and public programs focused on private land, shown in Attachment 3. With the approval of the Greener As We Grow Capital Profile, and if the City's application for the federal government's 2 Billion Trees grant is approved, Administration will have the funding required to plant two million new urban trees by 2030.

Growth and maturation of Edmonton's urban forest will require an adjustment to the program budget to support ongoing maintenance, protection and preservation. As new funded capital projects are implemented, Administration will bring forward operating funding requests as part of future Supplementary Operating Budget Adjustments and 2027-2030 budget deliberations.

The number of trees, natural areas and naturalized areas has grown in the last five years, with minimal change in operating budgets during that time. Although capital funding is approved to plant more trees from 2023 to 2030, existing operational budgets and resources are insufficient for adequate maintenance of the current inventory. If not properly maintained, the urban forest

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is at risk of premature or excessive loss, or may pose safety risks to the public. During the 2023-26 Budget deliberations, unfunded service packages were brought forward to address the need for additional support, however these have remained unfunded.

If a private tree bylaw were to be pursued, costs would be incurred for development, with annual, ongoing operational costs for implementation. Based on the cost to develop Bylaw 18825 - Public Tree Bylaw, Administration estimates \$1 million would be required to develop a private tree bylaw, including project management resources, permitting system (e.g., software development), research, communications and public engagement. Ongoing implementation costs would be dependent on the scope of the bylaw, administrative needs and enforcement expectations.

Costs associated with the development and implementation of future stewardship programs for trees on private land are presently unknown. Any new initiatives that promote tree planting, retention and preservation on private land would require additional funding.

COMMUNITY INSIGHT

Citywide Naturalization and Tree Planting Engagement

Administration conducted comprehensive research and engagement when building The City Plan, updating the Corporate Tree Management Policy, developing Bylaw 18825 and developing the Urban Forest Asset Management Plan. Throughout this work, Edmontonians consistently expressed support for the preservation of trees, maintaining existing urban tree canopies, naturalization in locations such as parks, along roadways and around stormwater management facilities (SWMF) and planting more trees for a greener Edmonton. Engagement highlights are included in Attachment 4.

In May 2022, Administration conducted a citywide online survey for the Capital Planning for Greener As We Grow project and to inform the new Naturalization, Restoration and Reclamation Plan. The survey provided insights about public awareness and support for naturalization, and boulevard and open space tree planting, as well as how Edmontonians use naturalized and open spaces. The survey was available through the Edmonton Insight Community and on the City website as an open link survey and was completed by 4,647 respondents. Overall, respondents expressed support for naturalization, tree planting and tree preservation.

A second phase of engagement for the project is scheduled to launch in May 2023.

Administration will gather input on both the “where” and “how” of naturalization and tree planting, including the opportunity to provide feedback on maps of public lands identified for possible naturalization and tree planting. Residents and stakeholders will have multiple opportunities to provide feedback through Engaged Edmonton, online meetings and in-person pop-up events. An extensive list of stakeholders, including homeowners associations, community leagues, utility companies, environmental groups and internal City employees, have been identified for engagement on the City’s approach to naturalization and tree planting on public lands.

While this public engagement is taking place, and until the new Naturalization, Restoration and Reclamation plan has been completed, Administration is not converting large areas of maintained turf to naturalized grass based on feedback from Council. For parks and open spaces inventory

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already maintained by the City, Administration is focused on planting trees and shrubs in existing naturalization areas. Naturalization of grass, trees and shrubs is still being incorporated into the design of new landscapes through capital projects and by developers.

Community Level Naturalization Engagement, Communications and Education

Administration launched the Parkland Care and Naturalization Campaign in 2021 to continue to increase awareness and understanding of the City's vision for sustainable green spaces. In 2022, the campaign focused on naturalization processes including the stages of naturalization and changes residents can expect to see over time in parks and open spaces, around stormwater management facilities and along roadways. The campaign also included the City's service levels for turf maintenance, horticulture and pest management. The 2022 campaign used updated tactics to improve outreach, including additional media channels and volume, postcards, signage, website and 311 updates. Survey results from the Greener As We Grow project in May 2022 indicate a majority of respondents have awareness, understanding and support for naturalization in the City shown in Attachment 4. The 2023 campaign includes a naturalization video, educational interpretive signage for stormwater management facilities and postcards for residents near these areas.

Administration is also developing a new process to determine and execute the appropriate level of public engagement, communication and education for its ongoing and annual, operational level naturalization work. The new process will require tactics and timing to be planned and carried out for each project according to an assessment of complexity and risk. This process is expected to be in place for 2024.

GBA+

Administration will continue to explore how different groups will be impacted by alterations to public and private green spaces. Specific impact assessments and equity measures will be examined during the development of programs, projects or improvements, or at the site level during tree planting or naturalization. The mapping tool being developed as part of the Greener As We Grow and Naturalization, Restoration and Reclamation Plan projects will allow Administration to ensure equity measures are included in the evaluation of future potential tree planting areas.

Potential impacts to increasing tree planting and regulating trees on private and public land include:

- Naturalization or tree planting of smaller open spaces may reduce access to passive outdoor recreation spaces for residents near their homes, disproportionately impacting those with reduced mobility and those with less access to larger parks or designated sports fields. These considerations can be mitigated through the design process.
- Seniors or residents with reduced mobility may experience an undue burden of maintaining properties or walkways with more tree litter (e.g. raking up fallen leaves) from additional planting of adjacent City trees.

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- Residents living in areas of the city that lack spaces to plant trees or add naturalized areas may experience higher temperatures because of a greater heat island effect.
- Residents that do not own their home or land may have difficulty accessing urban forest stewardship or incentive programs.

Changes to private land requirements and stewardship or incentive programs must take into account the range of private land types and populations utilizing them.

ATTACHMENTS

1. Current and Potential New Programs, Projects and Initiatives
2. History of Naturalization in Edmonton
3. Financial Impacts for Urban Forest Growth, Preservation and Ongoing Maintenance
4. Engagement Highlights