

Pathway to a Sustainable Urban Forest: Implementation of the Urban Forest Management Plan 2022-2031

ISSUE

Saskatoon's urban forest, including trees on public and private land, is of great environmental, social, and economic value. The trees sequester over 26,750 tonnes of carbon annually, provide a sense of community, and improve quality of life. According to recent estimates, the economic value of public trees in Saskatoon (excluding shelterbelts and afforestation areas) is more than \$530 million.

In March 2021, City Council approved the Urban Forest Management Plan (UFMP) that examines the state of the urban forest and outlines the strategy to plan, grow, manage, and protect the trees and canopy. This report presents a road map to address the goals of the UFMP including specific initiatives and timelines over the next 10 years. The plan includes initiatives that are funded and medium and long-term initiatives that may seek funding in the future.

RECOMMENDATION

That the Standing Policy Committee on Utilities, Environment and Corporate Services recommend to City Council that the Pathway to a Sustainable Urban Forest: Implementation of the Urban Forest Management Plan 2022-2031, be approved, in principle.

BACKGROUND

Implementation of the UFMP is aligned with civic priorities, including those found in the Strategic Plan 2022-25, Official Community Plan, and Pathways to an Integrated Green Network: Implementation of the Green Infrastructure Strategy (Green Pathways).

Strategic Plan 2022-25

At its January 31, 2022 Regular Business meeting, City Council approved the City of Saskatoon 2022-2025 Strategic Plan. An outcome in the Strategic Plan is, "The Green Network is integrated, managed, and enhanced to protect, land, air, and water resources". Key actions include:

- Implement actions in the Green Infrastructure Strategy and Implementation Plan within proposed timeframes; and
- Develop proactive policies, strategies, and practices to ensure the environment is protected from damage and, where possible, ecosystems are enhanced.

Official Community Plan

The UFMP is in alignment with the objectives and policies of the Official Community Plan, 2020, (Bylaw No. 9700) outlined in 2.7 Urban Forestry.

Objective

- (a) To protect the urban forest through sustainable practices, including new planting and the protection and maintenance of existing trees throughout the city.

Pathways to an Interconnected Green Network: Implementation of the Green Infrastructure Strategy

A healthy protected urban forest is one of several important pathways to an integrated green network. Action 3.4 of Green Pathways describes the implementation of the UFMP.

Urban Forest Management Plan

The UFMP was approved, in principle, by City Council March 22, 2021. Consultants were engaged in significant background work, including detailed analysis of changes in Saskatoon's tree canopy, strategies to mitigate risks and threats, and best practices from other municipalities. At its foundation, the UFMP provides the opportunity to articulate the strategic intent of the Urban Forestry team in their commitment to:

- Create plans that meet long-term recommended targets and objectives;
- Increase forest canopy and diversity of tree species;
- Manage the urban forest to meet long-term goals;
- Protect mature trees on public property; and
- Partner with other organizations and educate the public to achieve the common goal of a healthy, growing, and resilient urban forest.

Engagement

Engagement occurred prior to the creation of the UFMP with input from the public and key stakeholders, including SOS Trees Coalition, the Business Improvement Districts, and the Saskatoon and Region Home Builders Association. Subsequent engagement has focused on specific initiatives, for example, the internal and external engagement on a tree protection bylaw (Action 4.1) and tree protection processes (Action 4.2), internal engagement around the tree inventory (Action 3.4), and external engagement on service levels in the Business Improvements Districts (Action 3.3).

As part of the Environmental Awareness Survey, Saskatoon residents (n=1,012) were asked about trees in parks, along streets and afforestation areas. Respondents indicated that trees were the most important environmental feature on public land, with 92% of respondents identifying trees as important or very important. In the same survey, growing food was also identified as important, where fruit producing trees play an important role. Similarly, 95% of Industrial, Commercial, and Institutional sectors (n=151) identified trees in parks, along streets and afforestation areas as important.

Additionally, 79% of respondents identified tree planting as the environmental feature businesses were most interested in installing.

DISCUSSION/ANALYSIS

The implementation plan (see Appendix 1) identifies 18 actions that the City and community can take to create a sustainable urban forest. The UFMP identified 4 key areas:

- 1) Planning for trees;
- 2) Growing the urban forest;
- 3) Maintaining the urban forest; and
- 4) Protecting the urban forest.

During development of the implementation plan, a new section - Reimagining the Urban Forest - was added to align with priorities identified in the Strategic Plan 2022-25, including themes of reconciliation, equity, diversity, inclusion that explore environmental, social and cultural connections to the urban forest.

Key Areas	Vision
1.0 Planning for Trees	Plan for the future of our urban forest through process improvements that increase and improve space for trees
2.0 Growing the Urban Forest	Increase tree planting and tree species diversity
3.0 Maintaining the Urban Forest	Improve maintenance (e.g., pruning, watering), enhance service levels, and improve the tree inventory
4.0 Protecting the Urban Forest	Formalize tree protection through a bylaw, improved tree protection processes, education, and asset preservation
5.0 Reimagining the Urban Forest	Enhance environmental, social, and cultural connections between the urban forest and our community

The implementation plan has 18 action areas with 131 corresponding initiatives. Each action identifies who is accountable, the project lead, and the internal and community partners. Initiatives vary in scope and scale and are identified within each budget cycle.

Each initiative includes a proposed start time with more initiatives identified in the first six years of the plan. There are fewer initiatives towards the latter part of the plan, as subsequent initiatives will be based on outcomes of earlier initiatives.

Some initiatives are underway as part of continuous improvements to urban forestry operations. Additional initiatives will be funded through federal green funding programs

and some initiatives will be brought forward as business cases (new initiatives) or budget requests (enhanced/continuing operations) during the regular budget process.

FINANCIAL IMPLICATIONS

Initiative funding can occur through various mechanisms including capital funding requests (e.g., Reserve for Capital Expenditures, Deferred Tree Replacement Account), operating funding requests, and external grant and/or partnership funding opportunities.

2022-2023 Funded Initiatives

The table below summarizes initiatives in-progress within existing operating or capital budgets, or projects identified in funding opportunities with the Federal Government.

Project Title	City Funding Source	External Funding	Status	Action
Tree inventory upgrades	Existing Operating Budget		In-progress	3.4A
Improve accuracy of the tree inventory	Existing Elm Inventory Capital Project		In-progress	2.3B
Preliminary work on tree bylaw	Tree Protection Policy and Bylaw Update Capital Project		In-progress	4.1A
Pest Management Plan	Existing Operating Budget		In-progress	4.4A
Dutch elm disease communication including examination of proper barriers to proper disposal	Existing Operating Budget and Solid Waste Reduction and Diversion Plan Capital Project		In-progress	4.6A
Pilot fruit tree planting in park redevelopment	Flood Control Strategy Capital Project	Disaster Mitigation and Adaptation Fund	In-progress	2.1C
Increase park tree planting	Park Enhancement Capital Project; Deferred Tree Replacement Account	Federal Government Funding	Pending Federal Government approval	2.1
Study investigating development processes and tree planting	Annual tree planting programs	Federal Government Funding	Pending Federal Government approval	2.1A & 1.1C,E
Water conservation and tree watering initiatives	Water Conservation Strategy Capital Project	Federal Government Funding	Pending Federal Government approval	3.2A

2024-2031 Funding Options

Financial requirements for initiatives scheduled for 2024 and beyond will be brought forward through future reporting, and initiatives will be approved through the regular Business Plan and Budget approval process.

External Funding Summary

Administration has recently submitted several applications to federal funding opportunities for initiatives within the implementation plan including:

- Infrastructure Canada - Natural Infrastructure Fund (Large Project Stream);
- Natural Resources Canada – 2 Billion Trees (application led by Meewasin in partnership with the City); and
- Canada Community Revitalization Fund.

If successful, federal contributions will allow initiatives to expand their scope or proceed sooner than expected. Generally, municipalities must be able to provide matching funding, as well as funding to support staff time and operational expenditures. As such, initiatives that receive funding approval during budget deliberations are well positioned to leverage additional funding from external sources, while unfunded initiatives may be unable to meet the matching requirements and therefore not often eligible for external funding.

OTHER IMPLICATIONS

Privacy, legal, social, and detailed environmental implications for projects identified as part of the UFMP will be reviewed and addressed in each project stemming from the implementation plan.

Environmental Implications

Broadly speaking, environmental implications, risks and benefits of implementing the UFMP as an integral part of the green network are significant. The UFMP is informed by the risks identified in Saskatoon's Climate Projections and Possible Impacts report and Meewasin's Valley-Wide Resource Management Plan, which highlights that climate change and biodiversity loss are the two biggest risk factors to Saskatoon's green network. Climate change projections for the region and the resource plan indicate an increased risk for external impacts on the green network and specifically the urban forest, such as pests, heat, and changing precipitation patterns like drought and storms. Furthermore, deterioration of the Saskatoon's urban forest may increase the likelihood of the urban heat island effect, which can create temperatures on hard surfaces like pavement considerably hotter than the air, where shaded or moist surfaces remain close to air temperature.

Significant benefits of the UFMP are that it:

- Supports carbon sequestration and climate change adaptation and nature-based climate solutions through tree planting and preservation of our urban forest;
- Places value on natural assets and defines the services they provide;
- Supports partnerships and community-led change;
- Seeks to improve regulations, policies and practices; and
- Recognizes that opportunities for additional positive impacts can continue throughout implementation.

Triple Bottom Line Implications

A Triple Bottom Line assessment was undertaken for the UFMP to maximize co-benefits, such as improved access to the urban forest for the community, equity and reconciliation, climate mitigation, and habitat provision. More detailed Triple Bottom Line assessments will be completed for specific initiatives as they are developed to better understand benefits, limitations, and trade-offs.

NEXT STEPS

Administration is proceeding with projects and initiatives that are funded for 2022-2023 and will report back to City Council on a project-by-project basis as information or decision milestones are reached. In 2023, additional information on business cases and funding requests for 2024 and 2025 will be brought forward for consideration in the 2024/25 budget process.

Progress towards a healthy and sustainable urban forest will be monitored through the implementation plan and associated projects. Reporting will occur in alignment with the budget cycle so that business cases, budget submissions, and priorities are linked directly to progress and risks.

APPENDIX

1. Pathway to a Sustainable Urban Forest: Implementation of the Urban Forest Management Plan 2022-2031

REPORT APPROVAL

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