

# Report to Council



**Date:** August 26, 2024  
**To:** Council  
**From:** City Manager  
**Subject:** 2024 Sustainable Urban Forest Strategy  
**Department:** Parks Services & Long Range Planning

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**Recommendation:**

THAT Council receives, for information, the report from Parks Services & Long Range Planning, dated August 26, 2024, with respect to the 2024 Sustainable Urban Forest Strategy;

AND THAT Council adopt the 2024 Sustainable Urban Forest Strategy as attached to the report from Parks Services & Long Range Planning dated August 26, 2024.

**Purpose:**

To review and adopt the 2024 Sustainable Urban Forest Strategy.

**Council Priority Alignment:**

Climate & Environment

**Background:**

*Previous Council Resolution*

Resolution	Date
THAT Council receives, for information, the report from the Parks Services and Policy & Planning Departments dated April 17, 2023, with respect to the Sustainable Urban Forest Strategy goals and strategies.	April 17, 2023

Kelowna’s urban forest is defined as the total collection of trees and their growing environments found within the City’s boundary. This can include treed environments in both public and privately owned lands and can be cultivated and managed landscapes or completely natural areas. Kelowna’s urban forest provides a myriad of benefits for our community, including cooling the urban heat island, filtering polluted air and water, providing wildlife habitat, and improving people’s physical and mental health.

In 2011, Kelowna’s first Sustainable Urban Forest Strategy (SUFS) was endorsed by Council providing clear direction for urban forest management. The lifespan of this ten-year strategy has lapsed. As an OCP implementation action (Action #8), staff initiated the development of a new Sustainable Urban Forest Strategy in mid-2022 (as illustrated in Figure 1 below) to respond to the complex challenges faced by Kelowna’s urban forest over the next decade. These challenges include development and urbanization; climate change and extreme weather; forest pests and diseases; tree care and forest management; and urban ecosystem pressures.

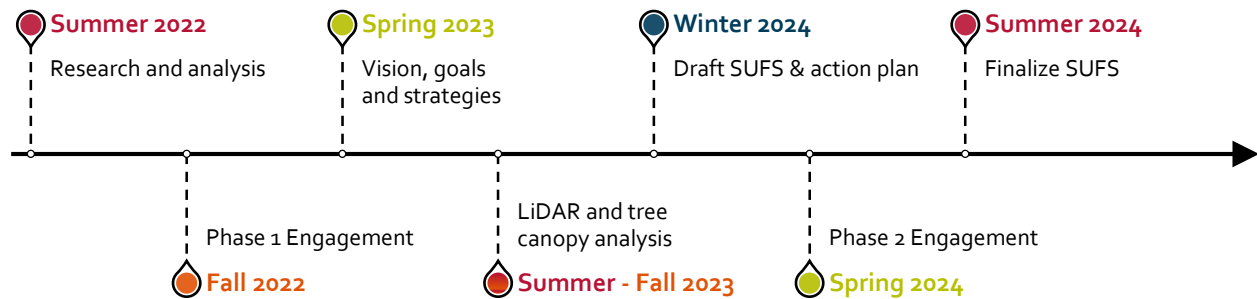


Figure 1: Process for developing the SUFS

**Discussion:**

Based on technical analysis, best practice review, and input from the community and staff a new Sustainable Urban Forest Strategy has been drafted (see Appendix 1, attached) with the following vision:

*Kelowna’s urban forest will continue to expand, connecting our green Urban Centres to our natural areas. Our urban forest will be managed to be healthy, safe and viable nature-based solution that improves livability and helps our community mitigate and adapt to a changing climate.*

As part of the development of the SUFS a fulsome tree canopy coverage analysis was completed using LiDAR data collected in 2023. Twenty-two per cent of Kelowna’s land area (excluding the Agricultural Land Reserve) is covered by tree canopy. Canopy coverage throughout the community, however, is not distributed equally as shown in Table 1. The Gateway and Urban Centres have the lowest canopy coverage. This coverage continues to increase moving from the Core Area to the Suburbs to the Rural Growth Strategy District. Of note, 80 per cent of Kelowna’s trees canopy is found in the Rural Growth Strategy District.

Based on this new analysis, the SUFS recommends revising the canopy coverage targets outlined in OCP Policy 14.2.2 Kelowna’s Tree Canopy as outlined in Table 1. The proposed targets take into consideration the following:

- Grassland cities, like Kelowna, typically support 20 to 25 per cent canopy cover;
- Current canopy coverage;
- The separation of targets by growth strategy district to avoid the large size of Rural Growth Strategy district obscuring progress in other areas;
- Land use and impervious area;
- Possible public and private plantable area; and
- Where canopy coverage is needed to support higher population densities.

Table 1: Current canopy cover and proposed targets by Growth Strategy District





Growth Strategy District	2023 Canopy Coverage (excluding ALR)	Current OCP target to 2040	Proposed new target to 2050
Urban Centres	12%	12%	20%
Core Area	15%	20%	20%
Suburban	20%	25% (on average across the three districts)	25%
Gateway	10%		15%
Rural	27%		25%

The timeframe to achieve these targets has been extended from 2040 to 2050. To achieve these targets and the Strategy’s vision will require significant investments in tree planting and protection by the entire community as outlined in the SUFS robust action plan. Based on average canopy size, it is estimated that nearly 80,000 trees will need to be planted by the City, residents, developers, and businesses over the next two decades. This represents approximately 1,200 more trees needed annually over what is currently planted. It should be noted that the proposed target for the Rural Growth Strategy District is lower than its current canopy coverage. As trees and forests in this area are largely natural, they are more likely than irrigated urban trees to be lost because of climate change effects, wildfire, and/or wildfire fuel mitigation projects.

The SUFS Action Plan provides a series of recommendations to protect and expand the urban forest. Developed around four key goals and ten strategies, the Action Plan includes 64 actions as summarized in Table 2. These actions will help steward the urban forest in both the public and private realm. Twenty-two per cent of the urban forest falls on public lands (15 per cent managed by the City, seven per cent in regional parks, schools, etc.) and the actions addressing this include capital projects to expand planting, maintenance and monitoring. Supporting street trees has been identified as critically important to protect our residents from extreme heat and create high quality urban spaces. The remaining 78 per cent of the urban forest falls on private lands and actions for these areas focus on education, programs, incentives, and regulation updates.

The SUFS also includes tree equity mapping which combines social vulnerability indicators, land surface temperatures, canopy coverage, and future canopy goals, to help identify priority areas for actions. As a result of this mapping and analysis, it is clear that the areas most needing trees, Urban Centres and the Core Area, are also the most constrained for access to private lands as our city continues to experience significant growth pressures and prioritizes more housing options to support more complete, compact communities.

Table 2: SUFS goals and strategies

Goal	Strategy	# Actions
Protect, connect, and expand the urban forest 	Strengthen policy, planning, and implementation to protect, connect, and expand tree canopy	17
	Expand the urban forest equitably in Urban and Core Areas	6
	Improve the quality and suitability of trees being planted for the site and climate requirements	3
Maintain a healthy, safe, and viable urban forest 	Clarify City procedures and standards to improve efficiency and manage risk	3
	Transition from reactive to proactive maintenance of City trees	5
	Ensure resourcing is sufficient to deliver levels of service that maximize urban forest benefits	5
Involve people and organizations in forest management 	Improve awareness of and participation in urban forest management	11
	Build relationships with syilx/Okanagan communities, First Nations Governments and Indigenous peoples through urban forest management	1
Monitor and innovate to achieve our urban forest vision 	Monitor change, report, and adapt management to new information	7
	Trial innovative approaches to dryland urban forestry	6

**Conclusion:**

The urban forest is recognized as an integral component to improve the resilience of people and cities to climate change, by reducing the impact of extreme events and overall improving the livability of our community.

Staff have continued to build on the momentum of the 2011 SUFS in protecting and expanding Kelowna’s urban forest, and the new SUFS formalizes an action plan for the next decade. Some of the initial implementation items, many of which are already in progress, include:

- Zoning bylaw improvements to soil volume requirements
- Development of a landscape standards bylaw
- Expansion of the Neighbourhoods program
- Increase street tree planting
- Improvements to Bylaw 7900 landscaping standards for boulevards and public rights-of-way
- Update canopy cover targets in the OCP
- Research partnership with UBC Urban Ecology and Sustainability Lab in Faculty of Forestry

**Internal Circulation:**

- Financial Services
- Infrastructure
- Capital Planning & Asset Management
- Climate Action & Environmental Stewardship
- Community Communications
- Data Services & Analytics
- Development Engineering

Development Planning  
Fire Prevention  
Infrastructure Delivery  
Infrastructure Operations  
Parks & Buildings Planning  
Transportation Engineering  
Utility Planning  
Water Quality & Customer Care

**Considerations applicable to this report:**

***Existing Policy:***

OCP Objective 14.2 Protect and expand a healthy and viable urban forest  
Bylaw No. 6469 Nuisance Trees and Shrubs Bylaw  
Bylaw No. 8041 Tree Protection Bylaw  
Bylaw No. 8042 Municipal Properties Tree Bylaw  
Bylaw No. 7900 Subdivision, Development & Servicing Bylaw (Schedule 4, Section 7 Landscape & Irrigation)  
Bylaw 10425 Maintenance of Boulevards  
Bylaw No. 12375 Zoning Bylaw (Section 7 Landscaping Standards)

***Financial/Budgetary Considerations:***

The full implementation of the 2024 Sustainable Urban Forest Strategy requires additional funding and resources at various stages. Funding and resourcing options will be investigated and/or budget requests will be made as part of the normal annual budget cycle when necessary. In the 2024 Budget, \$100,000 was allocated from the Council Strategic Fund reserve to begin to tackle some of the actions from the SUFS and advancing the Council priority action to increase the urban tree canopy.

***Consultation and Engagement:***

Engagement for the 2024 Sustainable Urban Forest Strategy was done in two phases. Phase 1 was done in Fall, 2022 and aimed to help draft the vision, principles and goals of the Strategy. The outcomes of this phase were presented to Council on April 17, 2023.

Phase 2 of the engagement provided the public an opportunity to review and provide feedback on the draft Strategy. This phase was done in conjunction with Phase 2 engagement for the Climate Resilient Kelowna Strategy. As part of this phase, the public had an opportunity to provide their input through a survey (hosted from May 15 to June 9, 2024), two in-person open houses (May 23 and June 6) and one virtual open house (May 29). This engagement is summarized in Appendix 2: Sustainable Urban Forest Strategy Phase 2 Engagement Summary.

***Communications Comments:***

Once endorsed by Council, the 2024 Sustainable Urban Forest Strategy will be posted on the City's website, and the Get Involved Kelowna project webpage will be updated to reflect the most current version.

**Considerations not applicable to this report:**

***Legal/Statutory Authority***

***Legal/Statutory Procedural Requirements***

Submitted by:

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