

ENVIRONMENT COMMITTEE

TO: *MAYOR AND COUNCILLORS*

SUBJECT: STAGE 1: URBAN FOREST STRATEGY – STATE OF THE URBAN FOREST

RECOMMENDATION:

THAT the report titled “Stage 1: Urban Forestry Strategy - State of the Urban Forest” report dated August 30, 2023, be received for information.

REPORT

The Environment Committee, at its meeting held on August 30, 2023, received and adopted the attached report presenting the State of the Urban Forest Report and soliciting feedback.

On behalf of the Environment
Committee,

Councillor J. Keithley
Chair

Councillor M. Santiago
Vice Chair

TO: ENVIRONMENT COMMITTEE (EC)
FROM: GENERAL MANAGER PARKS, RECREATION AND CULTURE
SUBJECT: **STAGE 1: URBAN FORESTRY STRATEGY - STATE OF THE URBAN FOREST**
PURPOSE: To present the State of Urban Forest Report and solicit feedback.

RECOMMENDATION

THAT the report titled “Stage 1: Urban Forestry Strategy - State of the Urban Forest” report dated August 30, 2023, be received for information.

1.0 POLICY SECTION

The Urban Forestry Strategy (UFS) and State of the Urban Forest Report corresponds with the Climate Action Strategy (2019) and the development of the Urban Forest Management Plan (UFMP). This report also aligns with the Tree Management Policy for Public Lands and the Burnaby Tree Bylaw (1996), An Environmentally Sensitive Areas Strategy (1992), and Burnaby Environmental Sustainability Strategy (2016).

2.0 BACKGROUND

The development of an Urban Forest Management Plan was identified as part of the City’s Climate Action Strategy as “Big Move” to expand and improve the health and resilience of the City’s green spaces, including boulevard, streamside areas and the urban forest.

The urban forest includes every tree in Burnaby along with the vegetation, soils and natural processes associated with individual trees and forests across our urban landscape. The urban forest is a central part of the City’s green infrastructure and provides critical benefits to the community, including reducing storm water runoff, sequestering carbon, reducing surface and air temperatures, and enhancing local biodiversity and beautification. However, urban forests are in decline from the pressures of climate change, pests and disease, and human densification.

In 2021, Diamondhead Consulting was engaged to assist in the development of the UFS. through a 4-stage process:

- Stage 1: State of the Urban Forest: including background research, benchmark analysis and key findings;
- Stage 2: Exploring Options;
- Stage 3: Draft Strategy;

- Stage 4: Final Strategy.

The Stage 1: State of the Urban Forest Report (Attachment 1) provides a summary of key findings related to Burnaby's current tree canopy cover. It also provides an analysis of tree distribution and equity across the city, areas to improve and protect biodiversity and quantifies the ecosystem services trees provide.

3.0 GENERAL INFORMATION

3.1 Stage 1: State of the Urban Forest

The services the urban forest provides to people and the city are categorized into four broad categories: Supporting, Provisioning, Regulating, and Cultural. Using an i-Tree Canopy analysis it is estimated that Burnaby's urban forest generates more than \$8.1 million in annual ecosystem services and more than \$54 million is accounted for in stored carbon.

The tree canopy cover for the City of Burnaby in 2022 is approximately 32%. The distribution of the City's tree canopy is 55% on parkland, 28% on private property, and 17% on roads and other City-owned property. In total, 72% of Burnaby's tree canopy is located on public lands.

As much of Burnaby's canopy is concentrated on large natural areas and parkland, it is not evenly distributed throughout the City. The areas with the lowest amount of tree canopy are also areas with the highest percent cover of impermeable surfaces (concrete, asphalt, and buildings) and the highest surface temperatures.

Using methods developed by American Forests, a non-profit organization, Burnaby's tree equity was measured. The tree equity score uses indicators such as climate, income, age, race, and employment to measure tree equity by dissemination area, as well as by road segment for street trees. The score ranges from 0 to 100, where 100 represents full tree equity in the area. The average Tree Equity Score is 87, which is relatively high. However, some areas score lower, which provides an important indicator for future planting sites.

The majority of parks and forested cover is observed to be transitioning between young and mature forest stages. In the areas sampled, the forested natural areas, showed little to no conifer regeneration reflected in the low sapling counts. The dominant forest cover type in the younger forested area is alder and maple tree species. The tallest, mature trees identified in Burnaby are located in Central Park and Burnaby Mountain, consisting of Douglas fir tree species. The tallest tree in Burnaby is estimated to be 68 meters high, approximately 1/3 the height of the tallest building in Burnaby.

High concentration of invasive species in the riparian and forested parklands are observed throughout the city. The highest concentrations of invasive species are impacting natural regeneration of native species, which directly affect biodiversity in these environmentally sensitive areas.

3.2 Urban Forestry Strategy & Next Steps

The State of the Urban Forest Report proposes five themes that will inform the development of the UFS: Plan, Grow, Manage, Protect, and Engage.

Urban Forest Strategy Proposed Five Themes	
Plan	Improving urban forest governance, monitoring, and reporting on the urban forest
Grow	Planting more urban trees, improving planting environments, and restoring forests
Manage	Using the best maintenance practices to maintain safe healthy and resilient trees and woodlands
Protect	Bolstering tree protection policy, reducing conflicts with trees and future-proofing the urban forest to climate change
Engage	Strengthening community stewardship, education, outreach and building relationships with indigenous peoples

The Stage 2: State of the Urban Forest report is being presented to The Planning and Development Committee and the Parks, Recreation and Culture Commission to gather feedback and input prior to Stage 2 of the strategy process: Exploring Options.

Specifically, staff would like feedback on:

1. The value of the Urban Forest and what the City’s goals should be related to the Urban Forest
2. The proposed Five Themes noted above

Following this, engagement on this report will be completed with the public, which will subsequently inform the development of the Draft Urban Forest Strategy and the themes noted above.

The Draft Urban Forest Strategy is planned to be developed this fall and will be presented to Committees and Council in early 2024. Feedback from the public, Committees and Council will be used to finalize the strategy and identify key moves for early implementation of the Strategy.

4.0 COMMUNICATION AND COMMUNITY ENGAGEMENT

As part of the development of the Urban Forestry Strategy, a robust public engagement process is also planned to gather input and feedback from the community regarding their values, goals and aspirations for the City’s Urban Forest and management of trees.

5.0 FINANCIAL CONSIDERATIONS

The Urban Forest Strategy has been allocated a budget of \$150,000 between the 2022 and 2023 Parks, Recreation and Culture operating budgets.

Respectfully submitted,

Mary Morrison-Clark, General Manager Parks, Recreation and Culture

ATTACHMENT

Attachment 1 – Stage 1: State of Urban Forest Report

REPORT CONTRIBUTORS

This report was prepared by Carmen Gonzalez, Deputy General Manager Parks, Recreation and Culture, Steve Bruneau, Director Parks, Greg Cecchi, Manager Parks, Graeme Waine, Parks Forestry Foreperson, Greg Shevchenko, Arboricultural Foreperson, and Mark McDonald, Parks Forestry Foreperson.