



7 Action Plan

7.1 Implementation Plan

Table Legend

The tables on the following pages are the implementation plan for the City of Burnaby's Urban Forest Strategy. Actions are itemized and assigned a timeframe for completion, responsibility ("leadership"), and financial commitment. See the key to table fields below:

TIMEFRAME

QUICK START : 1 year

Short 1 - 5 years

Mid 6 - 10 years

Long 11 - 15 years

Ongoing

FINANCIAL COMMITMENT

\$ Staff time or otherwise < \$10,000

\$ \$ \$10,000 - \$50,000

\$ \$ \$ \$50,000 - \$150,000

\$ \$ \$ \$ > \$150,000

LEADERSHIP

CSR Corporate Services

CSF Community Safety

ENG Engineering

FIN Finance

INT Information Technology

IRR Indigenous Relations and Reconciliation

LAF Lands and Facilities

PLD Planning and Development

PRC Parks, Recreation and Culture

ALL All affected departments

QUICK START : Actions that should start immediately because they can take advantage of existing processes or require minimal resources to implement.

BIG MOVE : Actions that are a transformative, high-impact initiative towards achieving the 40% canopy target but that require significant resources, planning and coordination.

PRC The department plays a primary role in implementation of the action.

PRC The department plays a supporting role in implementation of the action.

Action	Timeframe	Leadership	Financial Comm.
GOAL: PLAN 			
Strategy 1: Improve urban forest governance through interdepartmental collaboration and asset management integration.			
Action 1.1.  Establish an interdepartmental Urban Forest Strategy implementation team to meet semi-annually for status updates on implementation and to identify barriers and opportunities to improve implementation on targeted projects.	 1 year	PLD, PRC ALL	\$
Action 1.2.  Define City-managed green infrastructure (i.e. natural/enhanced asset classes), clearly assign management responsibilities, inventory assets, and embed these asset classes into City asset management plans.	 Short	PLD CSR, ENG, FIN, LAF, PRC	\$\$\$
Action 1.3. Ensure that green infrastructure assets, their benefits, and best practices for their application are integrated into the City's green infrastructure and climate adaptation plans and guidelines.	Ongoing	PLD ALL	\$
Strategy 2: Monitor implementation and adapt management to achieve adopted targets and maintain service standards.			
Action 2.1. Develop an urban forest monitoring program to track progress on Strategy implementation and to provide the data needed for asset management planning including regular tree and forest inventory cycles.	Short	PLD, PRC CSR, ENG	\$\$
Action 2.2. Undertake a "state of the urban forest report" at least once every six years to report on canopy cover, inventory outcomes, annual monitoring results and program performance.	Mid	PLD, PRC	\$\$
Action 2.3. Develop a GIS-based urban forest inventory system that enables real-time field access and updates for public trees and private replacement trees; make urban forest data—including tree inventory, canopy cover mapping, and other relevant information—accessible to all City departments; and enhance monitoring of invasive species in Burnaby's forested parks by exploring crowd-sourced reporting mechanisms.	Short	CSR, PRC ALL	\$\$
Strategy 3: Provide sufficient resourcing to implement the Urban Forest Strategy and align with best practices.			
Action 3.1. Review, as part of the ongoing asset management process, budget and staffing levels to support planned tree planting and maintenance service levels.	Ongoing	ALL	\$
Action 3.2.  Review the fees, function, and administration of the Civic Tree Reserve Fund to ensure costs recovered through the fund are sufficient to cover the average cost of planting, watering, tree establishment and maintenance on public land.	 1 year	PRC FIN, PLD	\$

Action	Timeframe	Leadership	Financial Comm.
Action 3.3.  Explore external and internal funding sources to support the urban forest program and implementation of the Urban Forest Strategy.	 1 year	PRC ENG, FIN, PLD	\$
Action 3.4. Explore opportunities to recognize or certify Burnaby's program is meeting a best practices standard for sustainable urban forest management (e.g., Tree Cities of the World status or Sustainable Forestry Initiative certification).	Mid	PRC CSR, FIN	\$
GOAL: GROW 			
Strategy 4: Improve policy, regulations, processes and standards for integrating trees and forests into the built environment.			
Action 4.1.  Consider codifying minimum tree canopy cover/tree density targets, green infrastructure, minimum pervious area and landscaped area by land use, with consideration of neighbourhood level tree equity scores, watershed classes, heat vulnerability and Burnaby's 40% canopy cover target.	 Short	PLD CSR, ENG	\$\$\$
Action 4.2.  Update landscaping requirements and guidelines to clarify minimum standards for tree planting, acceptable climate suitable species, size and species diversity, soil volume and acceptable permeable surface treatments. This may include updates to engineering design standards and supplementary guidelines, Town Centre Design Standards or expanded guidelines or requirements that arise through OCP and zoning updates, such as the R1 Zone.	 1 year	ENG, PLD, PRC	\$\$
Action 4.3. Consider developing landscape and ecology performance standards that require a minimum standard. Performance standards could be met through a variety of options including planting and canopy cover provision, green roofs, biodiversity enhancement, stormwater management and soil provision.	Mid	PLD PRC	\$
Action 4.4. Explore, through OCP and development permit area updates, policies to encourage landscaping standards that promote accessibility and social cohesion, guide biodiversity no net loss or net gain, encourage blue green systems, encourage privately owned public spaces (e.g. pocket parks), and/or dedication of pocket parks and streamside protection and enhancement areas.	Short	PLD ENG, PRC	\$
Action 4.5. Complete research, engage experts, and work with utility owners (City and third parties) to develop better strategies and revise standards to better enable the planting trees around utility infrastructure.	Short	ENG, PRC	\$

Action	Timeframe	Leadership	Financial Comm.
Action 4.6. Develop a green infrastructure solutions toolkit to determine when and where to apply solutions and use urban redevelopment as an opportunity to improve planting environments in the adjacent right-of-way.	Long	PLD ENG, PRC	\$\$
Action 4.7. Undertake a biodiversity conservation strategy, building on the Burnaby ESA strategy and Metro Vancouver Sensitive Ecosystem Inventory, to identify habitat hubs and corridors and guide their protection, enhancement and restoration.	Short	PLD, PRC	\$\$\$
Strategy 5: Integrate equity considerations into decision-making about urban forest investment.			
Action 5.1.  Develop a 10-year urban tree planting program to prioritize areas of low tree equity and declining service value, supported by an inventory of vacant boulevard planting sites that considers conflicts with utilities and planned capital works.	 Short	PLD, PRC CSR, ENG	\$\$\$\$
Action 5.2. Develop a capital program to retrofit green infrastructure (i.e. natural/enhanced asset classes), increase pervious area and increase tree canopy into low tree equity blocks, including programs to encourage neighbourhood participation in project sponsorship, selection and design.	Long	ENG, PLD PRC	\$\$\$\$
Action 5.3. Explore opportunities to support school sites to plant and maintain trees.	Short	PRC PLD	\$
Action 5.4. Explore opportunities for improving urban forest access and education in low tree equity areas.	Mid	PRC CSR, PLD	\$
Strategy 6: Restore forests and enhance biodiversity.			
Action 6.1.  Develop a 10-year natural area restoration planting program that prioritizes restoration, successional planting, and invasive species removal to enhance biodiversity in natural area parkland and around watercourses.	 Mid	PRC CSR, ENG, PLD	\$\$\$\$
Action 6.2. Trial the use of innovative and emerging practices to enhance urban forest management practices, such as applications of biochar soil amendments, pocket planting and mini-forest planting.	Ongoing	PLD, PRC	\$\$
Action 6.3. Review signage, fencing, and communication programs to improve deterrence of unauthorized trails in forested parks.	Short	PRC	\$\$

Action	Timeframe	Leadership	Financial Comm.
GOAL: PROTECT 			
Strategy 7: Protect trees and soil when possible and compensate for losses when necessary.			
Action 7.1.  Update the Tree Bylaw and Tree Management Policy for Public Lands to strengthen protections for City and private trees, with a focus on mature trees, tree replacement when necessary, and safeguarding trees in sensitive areas.	 1 year	PLD, PRC CSR	\$\$
Action 7.2.  Explore the creation of a "Tree Reserve Fund" to receive tree compensation monies for trees removed on public land and to fund site preparation, planting, watering and tree establishment.	 Short	PRC FIN, PLD	\$
Action 7.3. Develop tree protection standards for working around City trees and review enforcement of protection requirements for developers and contractors working around City trees.	Short	ENG, PRC CSR, PLD	\$\$
Action 7.4. Review the Soil Removal Regulation Bylaw to require the retention and protection of native soils on public land, private land, in streamside protection areas, and on land that will become public parks or boulevards through the development process.	Mid	ENG, PLD PRC	\$\$
Action 7.5. Develop decision-making criteria to support staff and developers to prioritize tree retention for high value trees and coordinate building and utility siting at the pre-application/design stage of development and capital projects.	Short	PLD CSR, ENG, PRC	\$\$
Action 7.6. Facilitate minor variances related to setbacks, building height, and parking minimums that enable the retention of significant trees on development sites. Facilitate minor variances related to setbacks, building height, and parking minimums that enable the retention of significant trees on development sites.	Short	PLD	\$
Strategy 8: Develop a coordinated approach for managing and resolving issues of park encroachment.			
Action 8.1. Update the Park Regulation Bylaw or create a new encroachment bylaw to deter encroachment.	Mid	PRC	\$\$
Action 8.2. Consider developing a trails strategy and trail standards, informed by best practices and provincial guidelines, to guide trail construction, decommissioning, inspections and signage within the city.	Long	PRC CSR, ENG, PLD	\$\$\$
Strategy 9: Increase the climate resilience of Burnaby's urban landscapes and urban forest.			
Action 9.1. Explore opportunities for naturalized water detention facilities and blue green infrastructure to be used as part of landscape irrigation schemes toward improved drought resilience and reduced demand on potable water.	Mid	PCR ENG, PLD	\$
Action 9.2. Working with regional local governments, land managers and local nurseries, develop planting trials for non-native and native species using seed stock of different phenotypes.	Mid	PRC PLD	\$\$

Action	Timeframe	Leadership	Financial Comm.
Action 9.3. Explore opportunities for municipal nursery production and agreements with commercial nurseries to stock preferred species and replacement tree sizes.	Short	PRC PLD	\$
Action 9.4. Review and strengthen wildfire and storm/disaster emergency preparedness, response and restoration plans and protocols; explore opportunities to test and pilot early fire detection systems; evaluate potential opportunities to implement Indigenous fire management practices in wildfire management plans.	Short	CSF, PRC CSR, IRR, PLD	\$\$
Action 9.5. Explore opportunities to restore or protect forest areas for carbon offsets.	Ongoing	PRC ALL	\$
Action 9.6. Review the Integrated Pest Management Plan to address existing and potential forest threats and responses to outbreaks.	Short	PLD, PRC	\$\$
Action 9.7. Review requirements to manage invasive species through species identification, education, training, and regulated disposal and treatment. Continue to build partnerships with organizations and authorities to help control and monitor invasive species.	Short	ENG, PLD PRC	\$\$
GOAL: MANAGE 			
Strategy 10: Maintain healthy and resilient trees using best management practices.			
Action 10.1. Transition from reactive to proactive maintenance, targeting a grid pruning program with a 5-to-7-year rotation, and including young tree pruning.	Mid	PRC CSR	\$\$\$
Action 10.2. Maintain the City's existing summer (weekly) watering program for 5-7 years following the planting of new trees.	Ongoing	PRC	\$
Action 10.3. Define levels of service for young tree structural pruning, young tree watering, grid pruning and service requests (i.e., response, inspection, resolution).	Short	PRC	\$
Action 10.4. Consider developing an urban wood utilization plan through a reconciliation and equity lens; developing a process that supports carbon storage by using waste wood to its most optimal use on both public and private land.	Mid	PLD, PRC	\$\$
Strategy 11: Maintain safe trees and forests to a reasonable standard of care.			
Action 11.1. Develop and implement an approved tree risk management policy.	Short	PRC	\$\$\$
Action 11.2. Establish operational procedures for risk inspection frequency, mitigation priority, mitigation timeframes, qualifications and documentation.	Short	PRC	\$\$
Action 11.3. Require a windfirm assessment as part of the application submission for any development creating a new forest edge adjacent to forested parks.	Short	PLD, PRC CSR	\$

Action	Timeframe	Leadership	Financial Comm.
GOAL: ENGAGE 			
Strategy 12: Enhance and build relationships with community partners to protect and enhance the urban forest.			
Action 12.1. Explore opportunities for partnering with institutional and governmental bodies to expand the urban forest on their properties.	Ongoing	PLD, PRC ALL	\$
Action 12.2. Continue to foster working relationships with utility providers to improve standards for tree pruning, tree planting and working around trees, and to support space for tree planting.	Ongoing	PLD, PRC ENG	\$
Action 12.3. Advocate among regional local governments for a working group to address western redcedar decline and other climate-driven health issues in forested natural areas.	Mid	PRC PLD	\$
Action 12.4. Explore opportunities for partnering with the nonprofit sector to pursue grants, increase private land tree planting, tree care and community science activity, and to increase capacity for urban forestry education and outreach in the region.	Ongoing	PRC PLD	\$
Action 12.5. Explore opportunities for partnering with post-secondary institutions for applied internships, summer student positions, or limited student research projects related to urban forestry.	Ongoing	PRC ENG, PLD	\$
Action 12.6. Explore opportunities for partnering with School District 41 and the Conseil scolaire francophone to support urban forest education and stewardship at Burnaby's schools.	Short	PLD, PRC	\$
Action 12.7.  Explore incentives for property owners to retain and plant trees that will be medium/large at maturity and maximize pervious surface areas. Incentives include grants to support tree maintenance and rebates or credits to assist with planting trees, increasing perviousness or installing green infrastructure.	 Short	PLD ENG, FIN	\$\$
Strategy 13: Build relationships with Host Nations and Indigenous Peoples living in Burnaby to integrate Indigenous perspectives with urban forest management.			
Action 13.1. Include urban forestry topics in government-to-government relationship building and collaborate with Indigenous Peoples to reflect their values and perspectives in urban forest management.	Ongoing	IRR, PRC PLD	\$
Action 13.2. Explore opportunities to support the roles and partnerships in urban forestry initiatives of Host Nations and Indigenous Peoples living in Burnaby; provide staff training to develop and improve Indigenous cultural competencies to support work towards reconciliation with Indigenous Peoples.	Short	IRR, PLD, PRC	\$

Action	Timeframe	Leadership	Financial Comm.
Action 13.3. Build connections between the urban forest program and cultural resource use, such as by using tree removals to provide access to culturally relevant wood and plant fibres.	Ongoing	IRR, PLD, PRC	\$
Strategy 14: Build community knowledge of and participation in urban forest management.			
Action 14.1. Make urban forest data available to the public, such as a dashboard that reports key urban forest metrics and progress on plan implementation.	Short	CSR, PRC INT, PLD	\$\$
Action 14.2. Explore opportunities for community stewards to support tree planting initiatives on public land, and to contribute to urban forest monitoring through citizen science.	Ongoing	PLD, PRC	\$\$
Action 14.3.  Expand community stewardship engagement opportunities and educational materials with a focus on planting more trees on private and public land, informing property owners and managers about the benefits of tree planting and protection, gardening with native plants and choosing the right species for their yards.	 Ongoing	PLD, PRC	\$\$
Action 14.4 Explore opportunities for developing a citywide self-guided and hosted urban forest walks program for people to improve access to the urban forest and provide opportunities to learn about and explore the urban forest; Consider developing a citywide arboretum program for residents/visitors to explore trees in the city.	Short	PRC ALL	\$\$

7.2 Monitoring Plan

The Urban Forest Strategy has been prepared as Burnaby's urban forest continues to change. The table in this section proposes performance indicators that can be tracked by City staff and urban forest program partners to assess progress on implementation and reaching the City's 40% canopy cover target. Performance indicators complement the canopy cover target by measuring features of the urban forest program, like new planting, vacant planting sites and inventoried tree condition or health, that present a more holistic picture of the urban forest. Suggested measures, measurement frequency, and probable method of data recording describe how the City can report on Strategy implementation. Actions in the Urban Forest Management Strategy align with other City strategies, as well as policies in the OCP.

Targets + Performance Indicators	Measure	Frequency	Method
Target			
Percent canopy cover citywide by 2075	40%	At least once every 6 years	LiDAR tree canopy data
Performance Indicators			
Percent canopy cover in equity priority areas	Increasing	At least once every 6 years	LiDAR tree canopy data
New (non-replacement) tree planting annual rate (all programs) average	3,460	Annually	Tree planting records (all programs)
Documented replacement ratio for every public and private tree removal	1:1 or higher	Annually	Tree permit records and work orders for replacement planting
Tree mortality	<2%	Annually	Work orders for tree removals
Pruning cycle: inventoried street trees	5 year cycle	Annually	Work orders for tree pruning
Pruning cycle: inventoried park trees	10 year cycle	Annually	Work orders for tree pruning
Species diversity ("10-20-30 Rule") for publicly owned trees	No species >10% No genus >20% No family >30	Annually	Tree inventory
Community satisfaction/ awareness of urban forestry	>50% satisfied, all services	At least once every 6 years	Community survey