

Urban Forest Strategy

2018 Update

Park Board Committee Meeting Monday, April 30, 2018





- Update the Board on the broad range of projects and activities to manage Vancouver's urban forest.
- Describe strategies and actions to protect, plant, manage, engage, and monitor the urban forest.
- Describe key urban forest management issues such as mapping forest canopy change, stewardship, and tree planting that are led by the Park Board.





- Policy Context
- Urban Forest Strategy Goal and Targets
- Status of the Urban Forest
- Key Management Issues
- Priority Actions
- Next Steps
- Acknowledgements



Policy Context



This update expands and refines the 2014 Urban Forest Strategy, which was a result of a Park Board motion (Oct 2012) to develop an Urban Forest Action Plan.

2018 Update aligns with the Park Board's Strategic Framework (2012), the Biodiversity Strategy (2016), and the Environmental Education and Stewardship Plan (2014).

Support City of Vancouver's policies and strategies including the Greenest City Action Plan (2011), the Healthy City Strategy (2015), and the Rain City Strategy (in process).



Goals of the Urban Forest Strategy

- 1. **PROTECT** the urban forest during development.
- 2. PLANT trees to grow the urban forest.
- **3. MANAGE** trees for health and safety.
- 4. **ENGAGE** citizens in the urban forest.
- 5. **MONITOR** the status and condition of the urban forest.







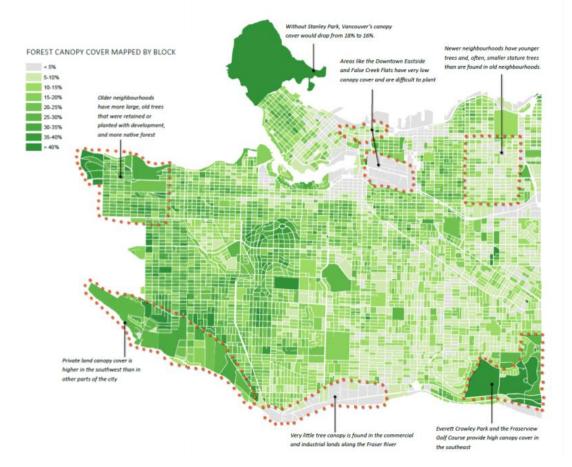


- 1. Plant 150,000 trees between 2010 and 2020.
- 2. Increase the urban forest canopy to 22% by 2050.
- 3. Restore or enhance 25 ha of natural areas, including forests, by 2020.
- 4. Double street tree density in below average blocks of the Downtown Eastside and Marpole neighbourhoods by 2030.

Status of the Urban Forest



- Vancouver's canopy cover was estimated at 18% in 2013 and 19% in 2015.
- Canopy is increasing on public land (streets and parks) through planting and tree growth.
- Canopy is declining on private land from incremental tree loss but the rate has slowed substantially because of the 2014 By-law amendment.



i-Tree Canopy Cover Analysis (1995 to 2015)





Estimating Canopy Change using i-Tree

i-Tree estimates canopy cover based on the presence or absence of tree canopy in orthophotos assessed at random points across the city (1200 points for Vancouver).

Revised Forest Canopy Loss Estimates



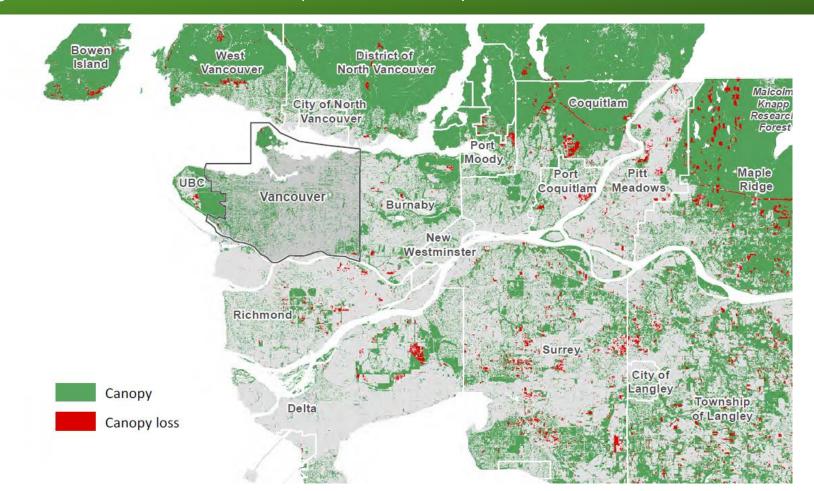


20% in 1995 Calculated by i-Tree revised from 22%

18% in 2013 Calculated using LiDAR Data **19% in 2015** Calculated using i_tree

Regional Forest Cover Loss (2000 to 2014)

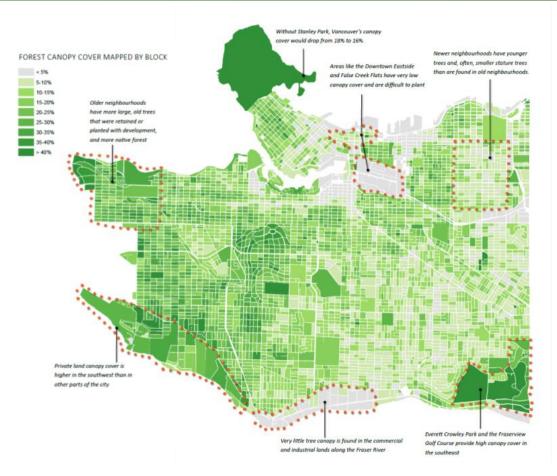




Urban Forest Patterns

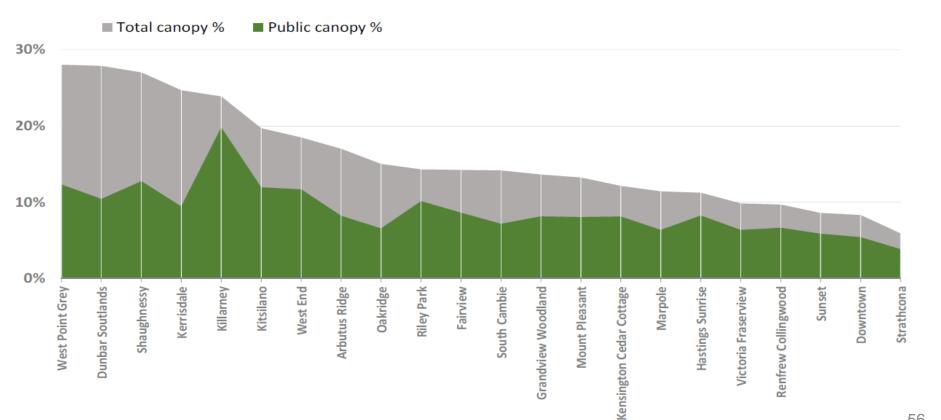


- Urban forest cover is not distributed equally because of land development patterns, history, and other factors.
- Private land canopy is highest in west and southwest neighbourhoods.
- Industrial areas like the False Creek Flats have very low forest cover.



Canopy Cover by Neighbourhood

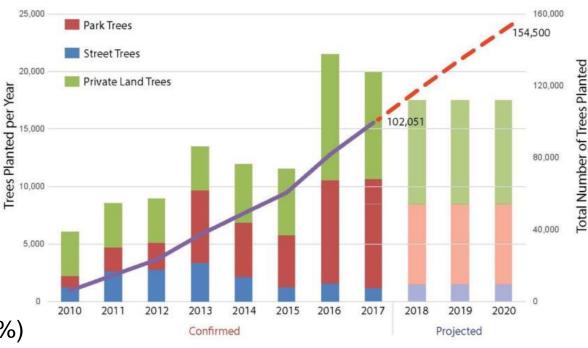






The Greenest City Action Plan (2010) includes a goal to improve access to nature and create the world's most spectacular urban forest. The target is to plant 150,000 trees between 2010 and 2020.

Progress (April 2018) Street trees: 17,047 (16%) Park trees: 41,708 (39%) Private land trees: 47,178 (45%) Total: 105,933 GCAP - Update on Tree Planting Target (December 31, 2017)



Growing the Urban Forest on Private Land





Park Board Tree Sales

- About 5,000 Trees Sold at Spring and Fall Tree Sales
- Continuing in 2018
- May 12/13 is the next sale

Supporting Community Stewardship



Earth Day in Everett Crowley Park

Street Tree Guidelines and Improving Soil Volumes



Support updating of the Street Tree Guidelines for the Public Realm to enhance the health of street trees, and ensure adequate soil volume for new trees.

Improved Development Planning for Tree Retention



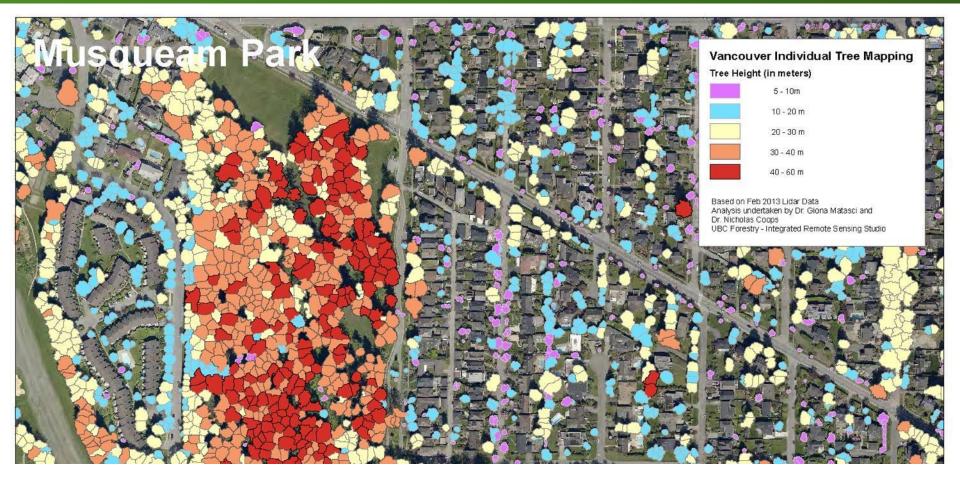


- Requiring an average of 3,800 trees planted per year as part of development applications;
 - Protecting trees during development with updated policies, processes and increased enforcement.



Improving Knowledge and Supporting Research





Supporting Partnerships



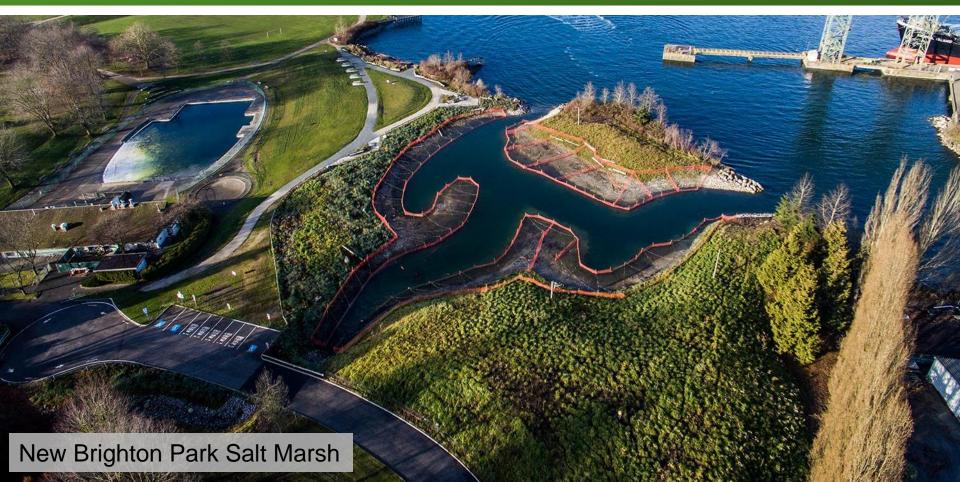


Welcome

It is our great pleasure to welcome you to the International Urban Forestry Congress (IUFC) under the title '**The Urban Forest – Diverse in Nature**', to be held in Vancouver, British Columbia, Canada from **September 30 – October 3, 2018**.

Enhancing Biodiversity





Adapting to Climate Change



- Priority tree planting in vulnerable neighbourhoods to reduce urban heat impacts.
- Tree selection to tolerate summer drought.
- Enhanced soil volume to maintain tree health, and supplemental watering during establishment.





Priority Actions





- Action 8. Support street tree planting in the Downtown Eastside, Marpole, False Creek Flats, and other priority neighbourhoods with below average urban forest cover.
- Action 12. Enhance natural forests in Stanley, Jericho, Musqueam, Everett Crowley, Renfrew Ravine, and other large parks, and riparian areas, as critical parts of Vancouver's ecological network.
- Action 20. Create a Public Tree Management Guidebook to guide Park Board tree planting, maintenance, inspection, protection, and other tasks.



- Action 21. Support updating of the Street Tree Guidelines for the Public Realm to enhance the health of street trees, and ensure adequate soil volume for new trees.
- Action 25. Replace the VanTree inventory and work order management software with a Geographic Information System (GIS) based tree information system.
- Action 37. Expand the Park Stewards program to support volunteerand school-based stewardship of urban forests in parks.
- Action 39. Provide funding, staff support, and resources for stewardship organizations to undertake urban forest projects.



- Action 40. Work together with local First Nations and the urban Aboriginal community to identify opportunities to develop culturally appropriate forest stewardship practices.
- Action 42. Measure Vancouver's urban forest canopy every 5 years using LiDAR and i-Tree methods.
- Action 45. Support research and education including hosting the International Urban Forestry Congress in 2018.



Three Park Board motions related to urban forestry are also being considered, with two of them specifically addressed in the 2018 Update:

- City Tree: Action to undertake a public engagement process in 2019 to designate an official tree.
- Tree Guardian Network: Action to expand the program to supporting watering of young and drought-stressed trees.
- Commemorative Trees and Shrubs: Urban Forestry and Fundraising staff are collaborating on how best to respond to this motion.





- The Park Board will continue to lead the management of Vancouver's urban forest on public lands, and support the City's efforts to protect and grow the urban forest on private lands.
- Next update in spring 2019.





THAT the Vancouver Park Board receive, for information, the Urban Forest Strategy: 2018 Update as outlined in this report and attached as Appendix A, which will guide the Park Board's efforts to protect and manage Vancouver's urban forest on public lands.



Consultant

This strategy was developed by **Diamond Consulting Ltd.** (Amelia Needoba, Camille Lefrançois, Lucy Foley, Trevor Cox, Maddy MacDonald and Mike Coulthard).

Staff Working Group

Vancouver Park Board

Nick Page Bill Stephen Erin Embley Amit Gandha Dana McDonald Joe McLeod

City of Vancouver

Katherine Isaac Lee Beaulieu Cameron Owen Angela Danyluk Ben Mulhall

