

City of Maple Ridge

Urban Forest Management Strategy

Council Presentation

Presented by:

Amelia Needoba, Principal & Senior Urban Forester

Cindy Cheng, Urban Forest Planner

Diamond Head Consulting Ltd.

February 27, 2024



Maple Ridge

Agenda

- Project scope and timeline
- What we've learned
- Draft strategic framework
 - Vision, tree canopy target, and goals
 - Strategies and actions
- Next steps





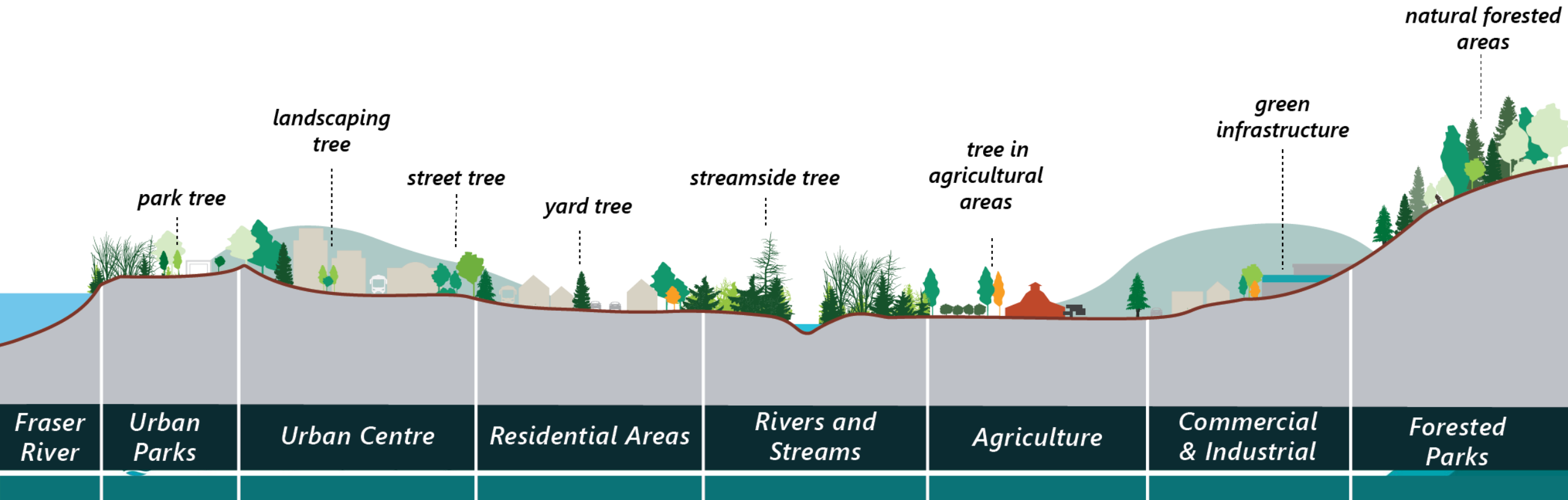
Purpose
Presentation on the Draft Urban Forest
Management Strategy and opportunity
for questions and feedback

Project Scope and Timeline



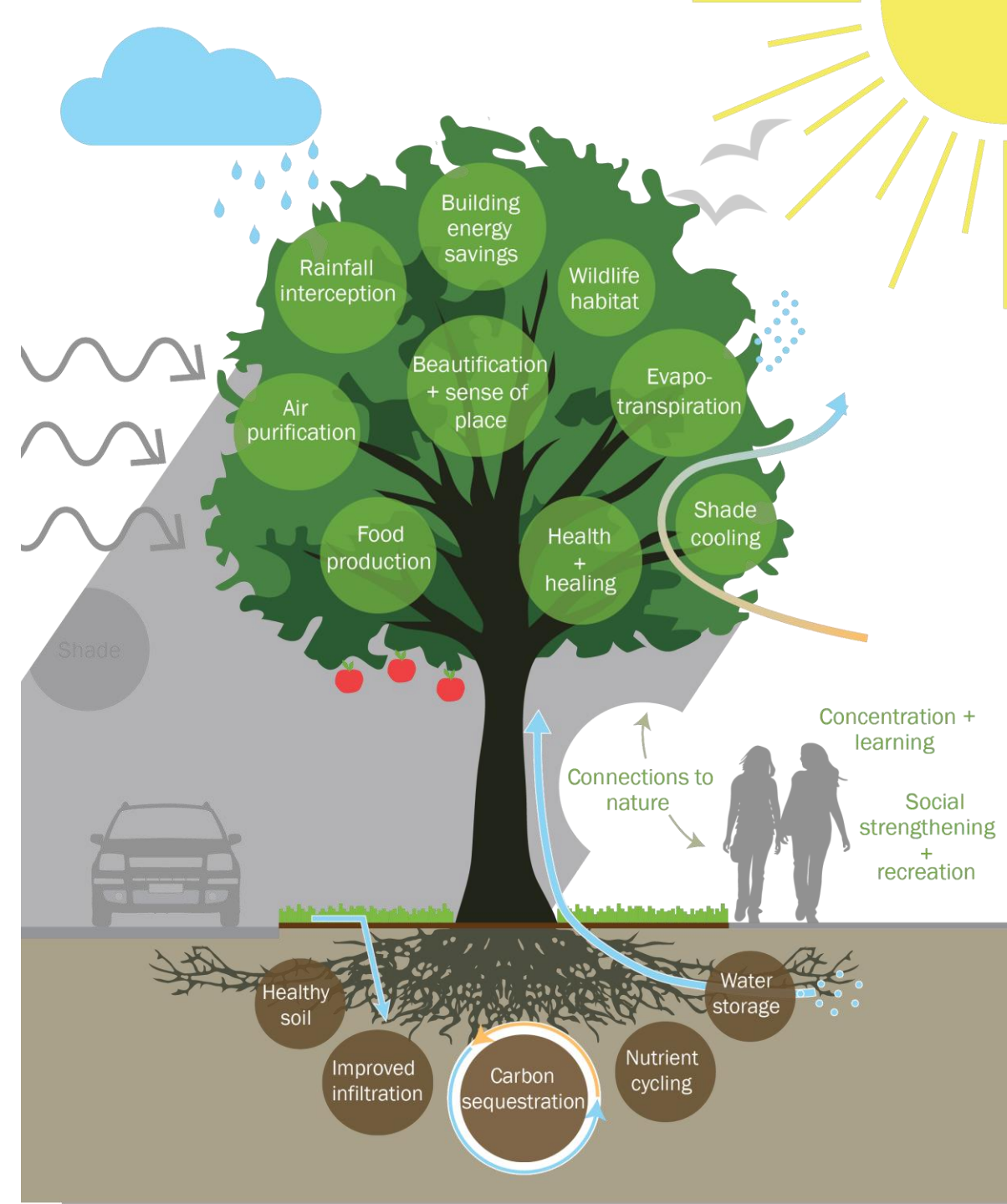
What is an Urban Forest?

Components of Maple Ridge's Urban Forest



Trees Provide Many Benefits

- Cooling urban areas
- Storing and sequestering carbon
- Providing habitat for wildlife
- Improving water and air quality
- Stormwater management
- Enhancing mental and physical health
- Encouraging social cohesion

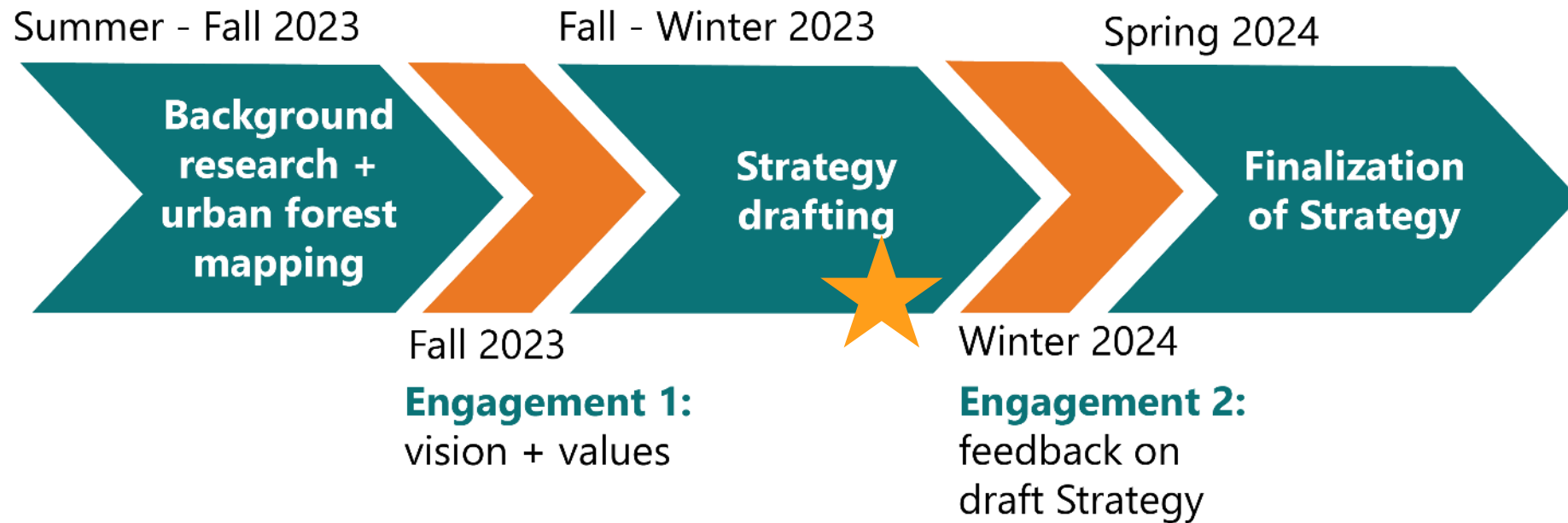


What Will the Strategy Do?

- Describe the current condition of the urban forest
- Develop a vision for the future
- Establish objectives and targets (Tree Canopy target)
- Provide a roadmap to achieving our future vision



Timeline



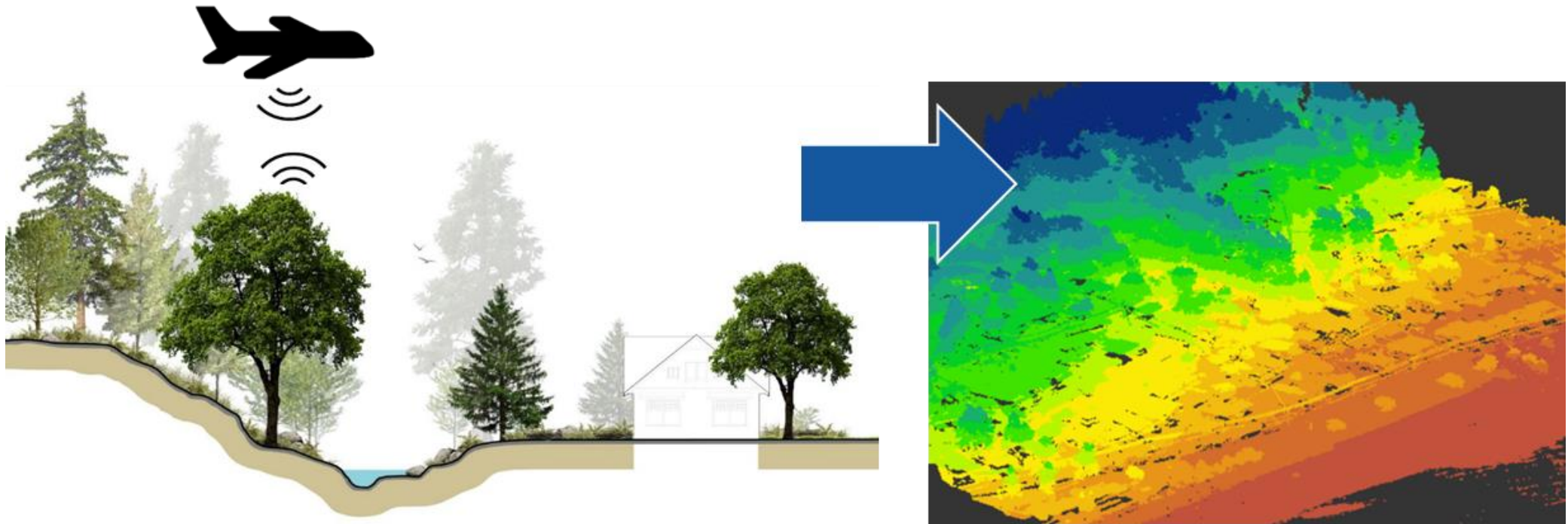
Where we are now

What We've Learned So Far

LiDAR Mapping

Tree canopy coverage estimated using Light Detection and Ranging (LiDAR) imagery

- Maple Ridge LiDAR flown in 2022, analyzed in early 2023



Current Canopy Cover

54%

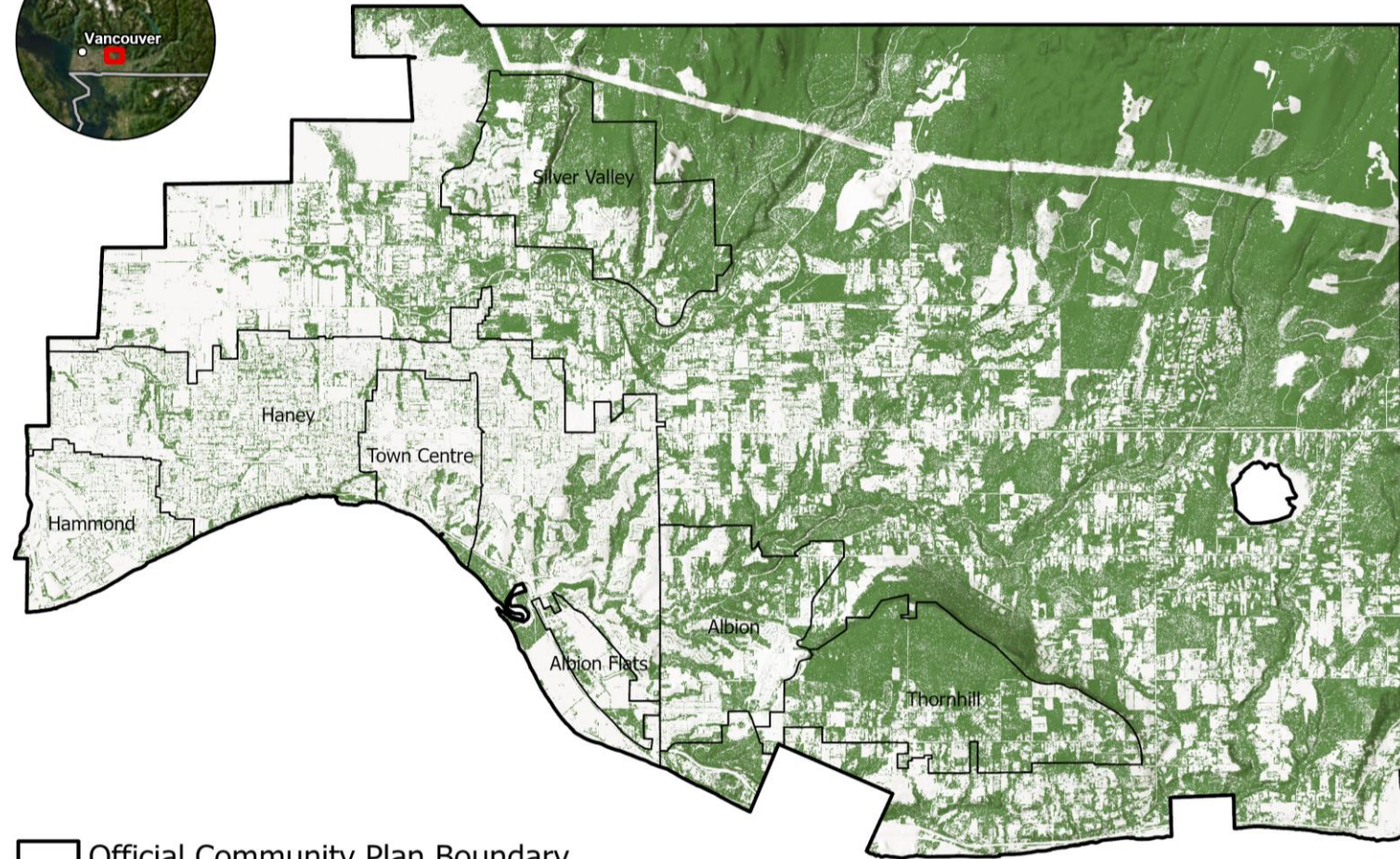
OCP Boundary
Canopy Cover

38%

Urban Boundary
Canopy Cover

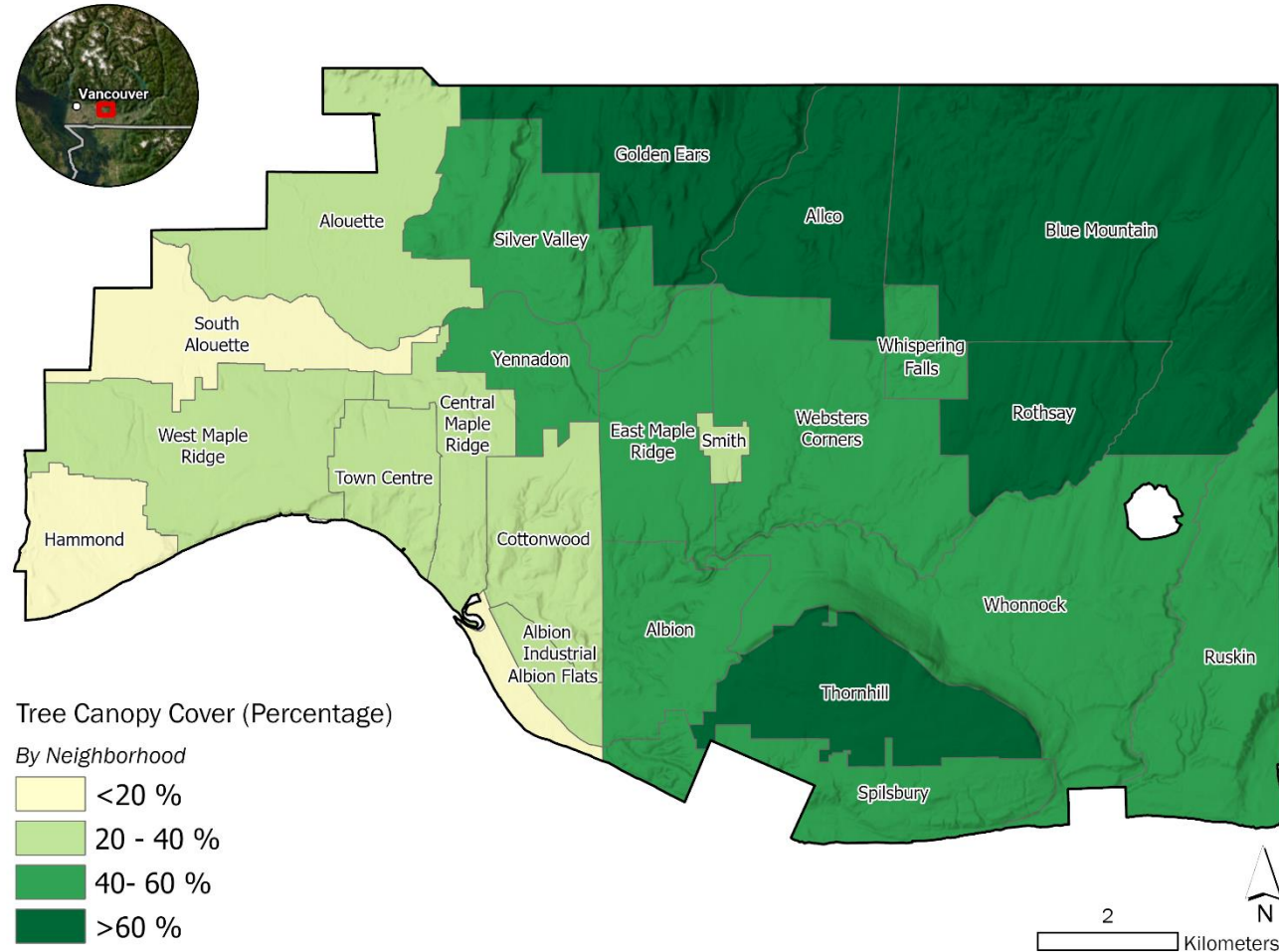
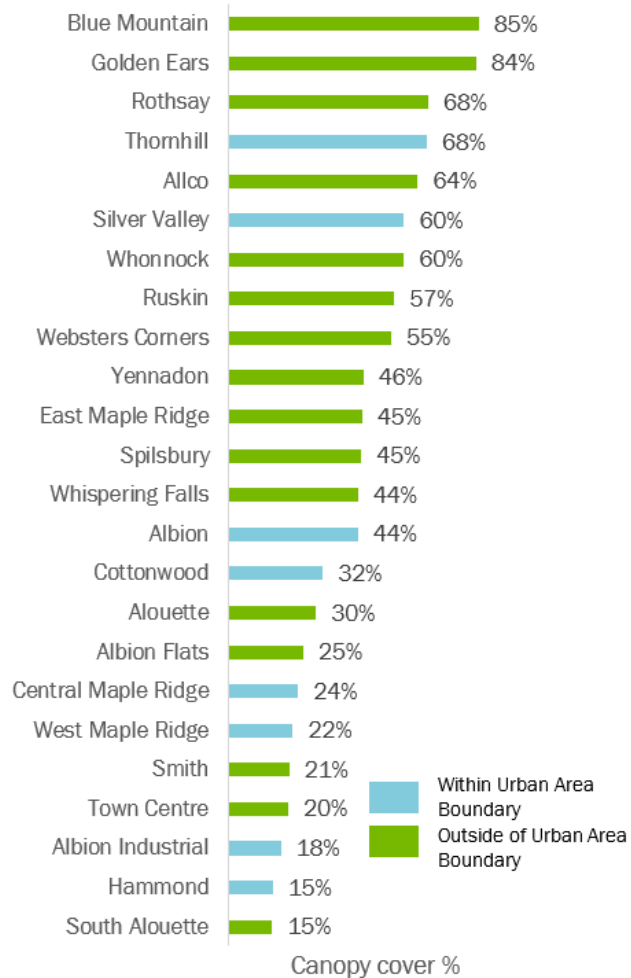
What is tree canopy?

Tree canopy is the area occupied by tree crown (leaves and branches) when viewed from above.



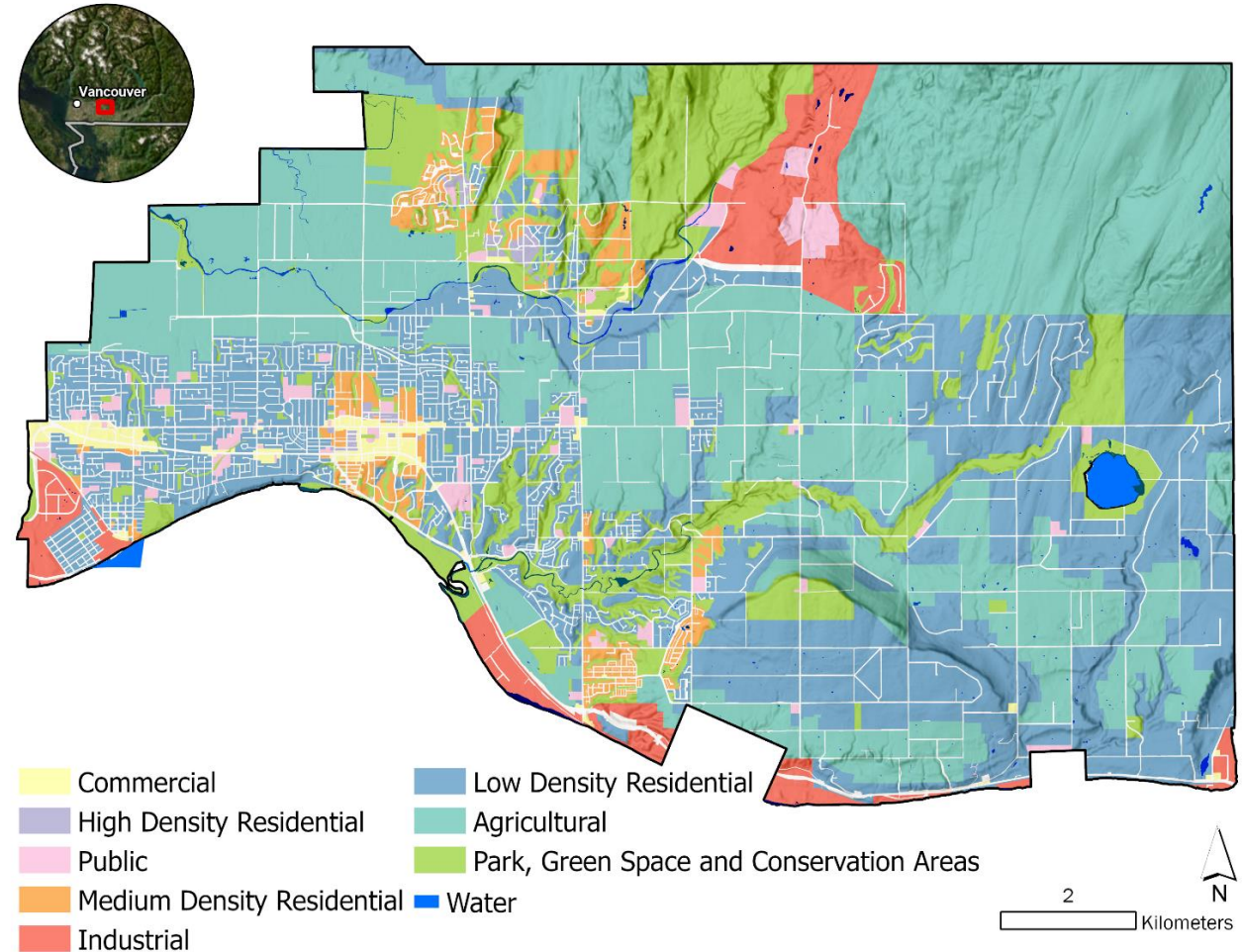
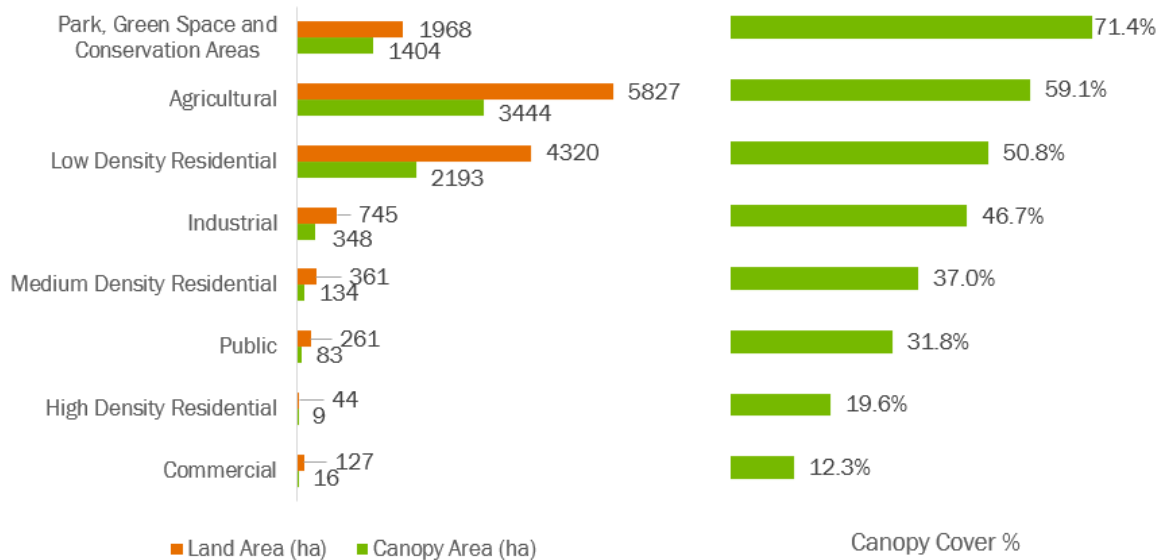
-  Official Community Plan Boundary
-  Tree Canopy Cover
-  Urban Area Boundary

Canopy Cover by Neighbourhood

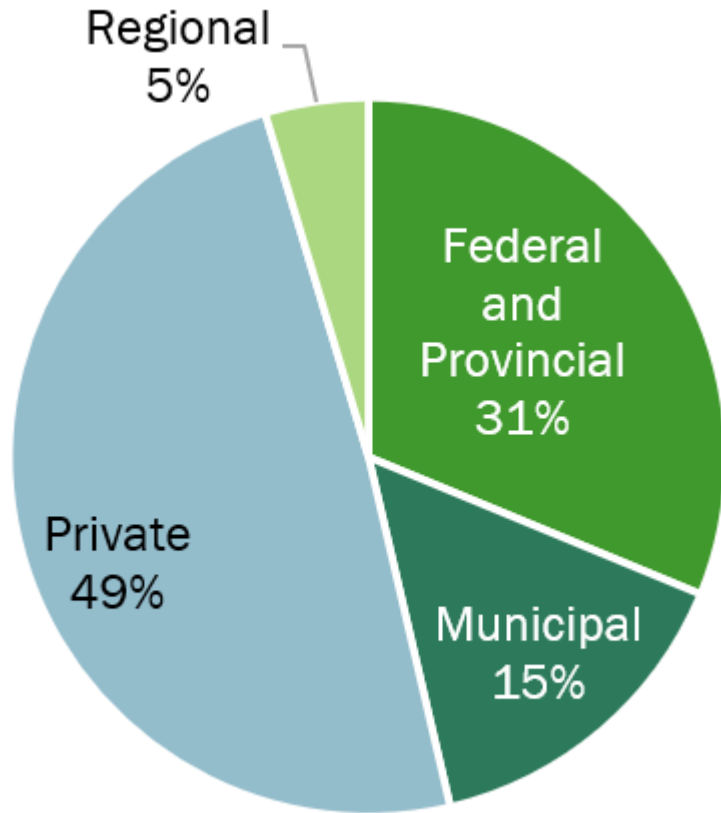


Canopy Cover by Land Use

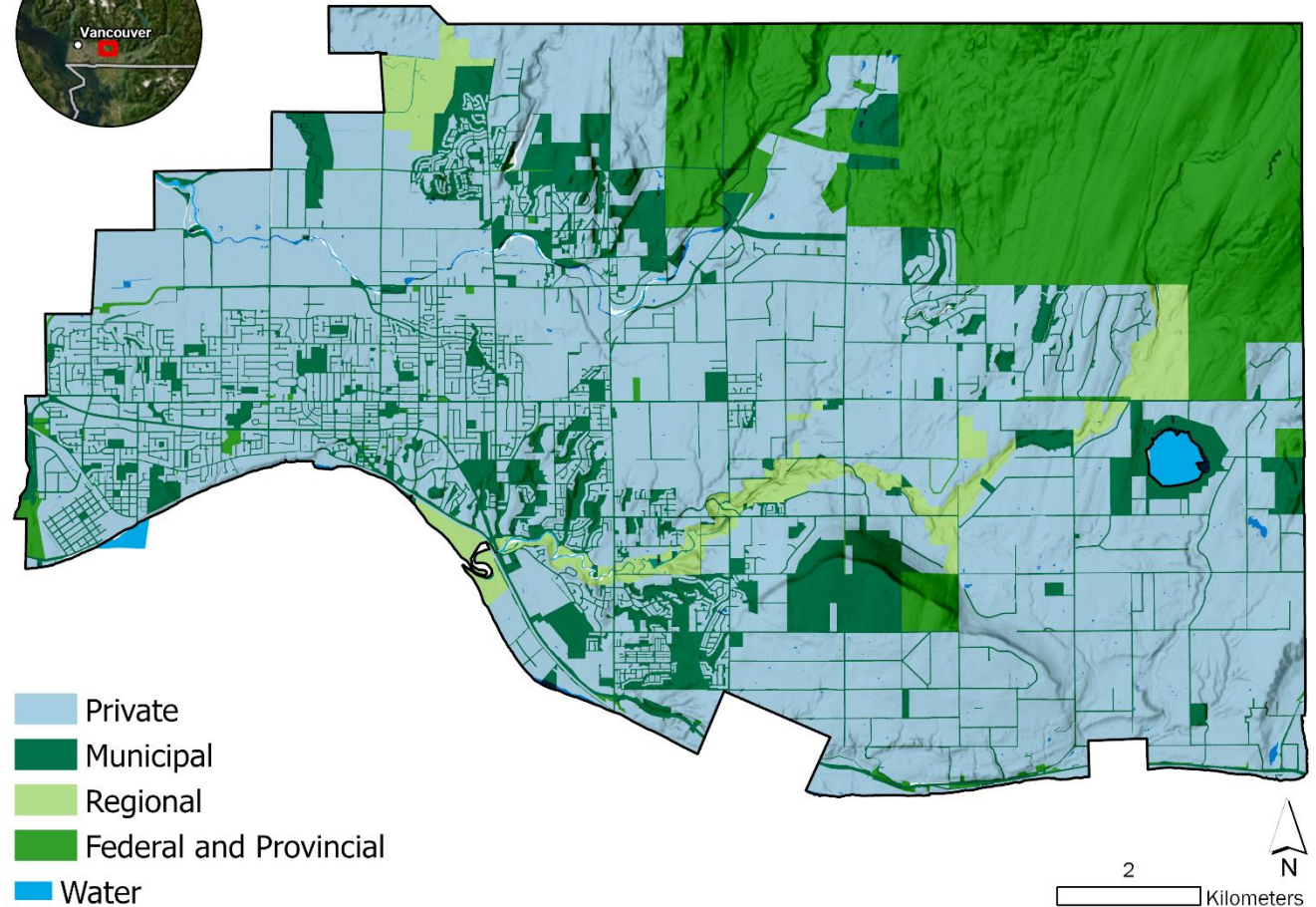
Agricultural lands
Low-density residential lands
Parks/green space/conservation areas
contribute to 92% of the total mapped canopy area



Canopy Cover by Ownership



Proportion of tree canopy area by ownership



Ecosystem Services

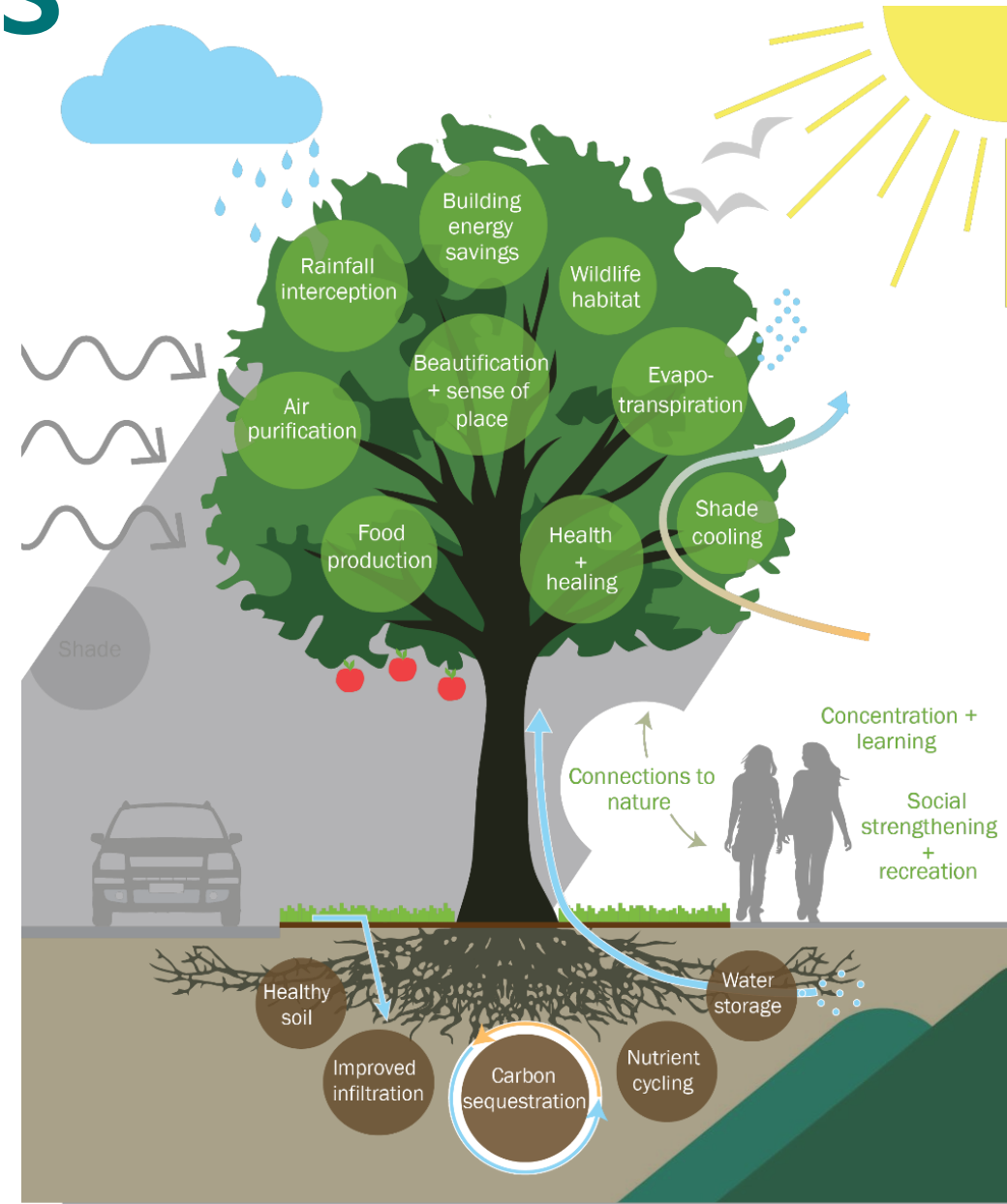
Maple Ridge's urban forest provides an estimated
\$145 million in cumulative carbon storage benefits, and
\$22 million in carbon sequestration, avoided stormwater runoff, and removed air pollutants per year



The stormwater runoff intercepted by Maple Ridge's urban forest in a year could fill roughly 1000 Whonnock Lakes!



The carbon sequestered by Maple Ridge's urban forest could offset emissions from 884 average passenger vehicles per year

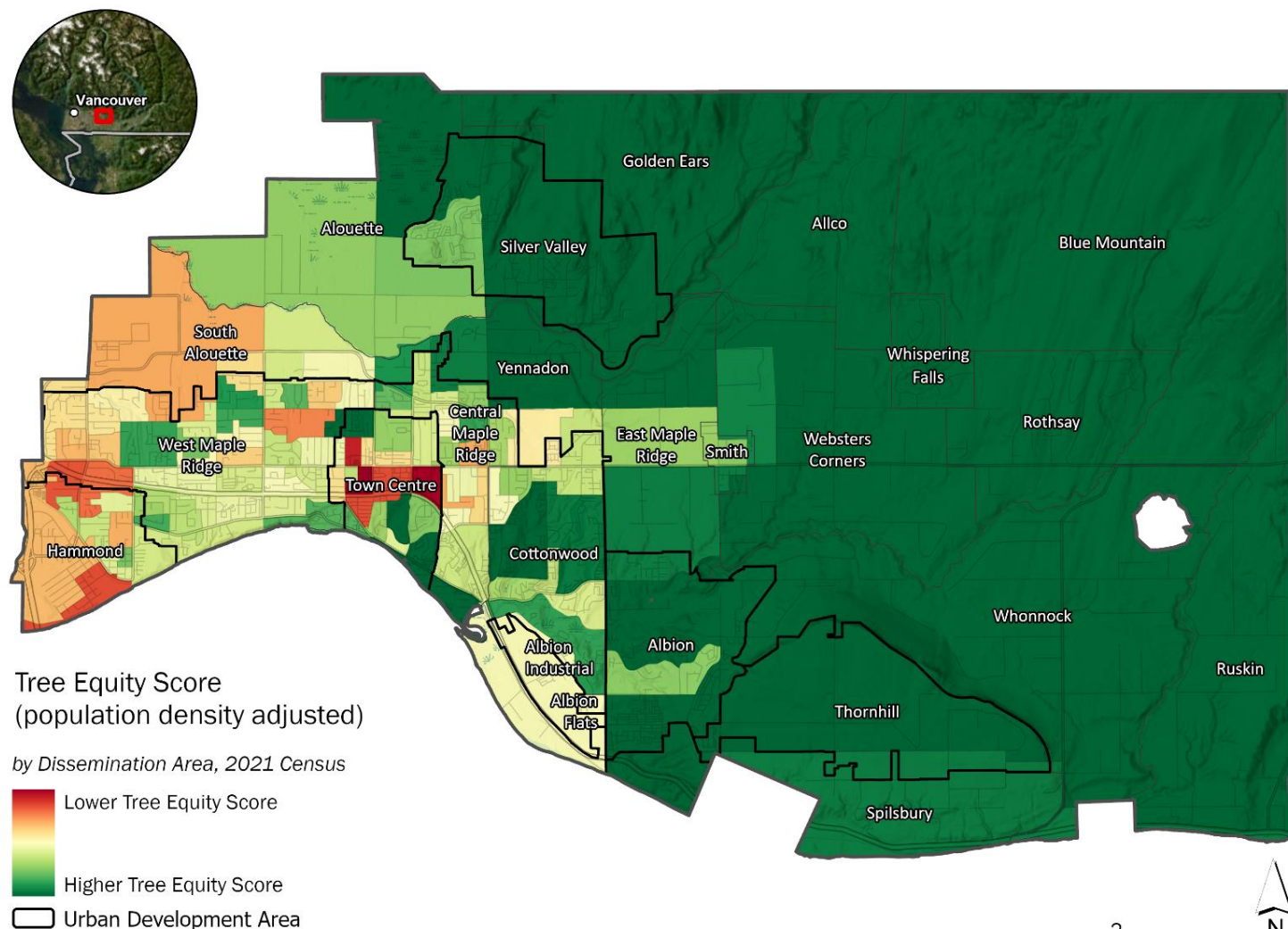


Tree Canopy Distribution

Equity Indicators include:

- Climate & Temperature
- Income
- Age
- Race and Ethnicity
- Employment status

A lower tree equity score = A greater priority for increasing tree canopy



Urban Forest Program Review



Criteria	Rating Summary
PLANNING	Fair
PLANTING	Fair
MANAGING	Fair
PROTECTION	Fair to good
PARTNERSHIP	Fair to good



Phase 1 Engagement: Summary

Who we heard from

255 Survey respondents

15 Mapping tool participants
(85 submissions)

225 Open house attendees

1,500 Project page visits



The infographic is titled "Open Houses" and lists three events: "Haney Farmers' Market" (September 23, 9am - 2pm, Memorial Peace Park | In-person), "National Tree Planting Day" (September 27, 3pm - 5pm, Maple Ridge Park | In-person), and "Albion Community Centre" (October 05, 4pm - 7pm, Albion Community Centre | In-person). Below this, it says "Survey" and "Let us know what you want to see in Maple Ridge's urban forest | Online" with a QR code. Then, it says "Mapping Tool" and "Share urban forest locations that you value and locations that need improvement | Online" with a QR code. Next, it says "Draft Strategy Feedback" and "More information to come! This is when the draft Urban Forest Management Strategy will be ready and will need your input." with a QR code. Finally, it says "Subscribe to the Engage Maple Ridge for the latest updates!" with a QR code. The background is light blue with white clouds and green trees at the bottom.

Open Houses

September 23
Haney Farmers' Market
9am - 2pm
Memorial Peace Park | In-person

September 27
National Tree Planting Day
3pm - 5pm
Maple Ridge Park | In-person

October 05
Albion Community Centre
4pm - 7pm
Albion Community Centre | In-person

Survey

Let us know what you want to see in Maple Ridge's urban forest | Online

Mapping Tool

Share urban forest locations that you value and locations that need improvement | Online

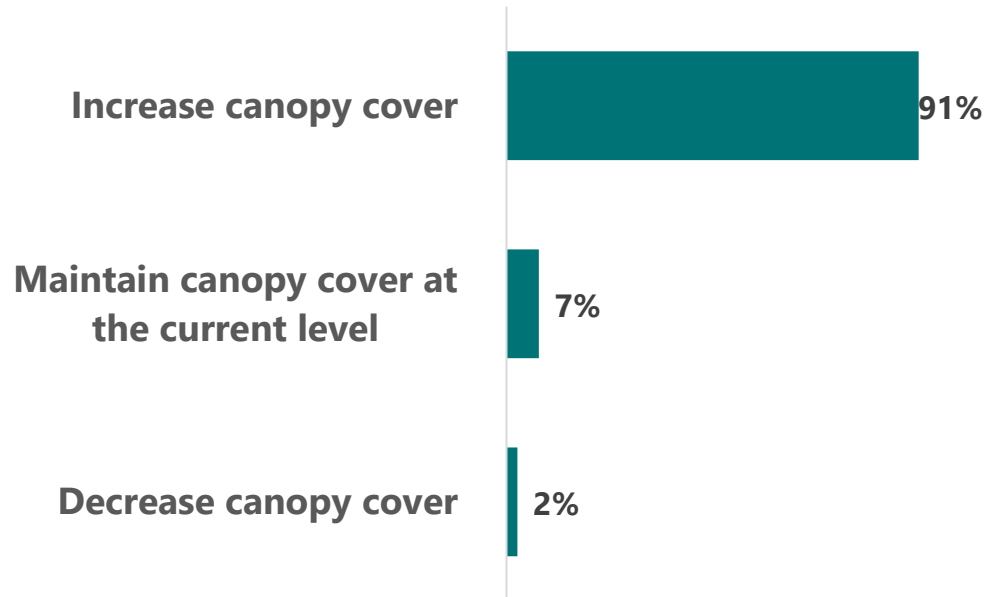
Draft Strategy Feedback

Spring 2024 More information to come!
This is when the draft Urban Forest Management Strategy will be ready and will need your input.

Subscribe to the Engage Maple Ridge for the latest updates!

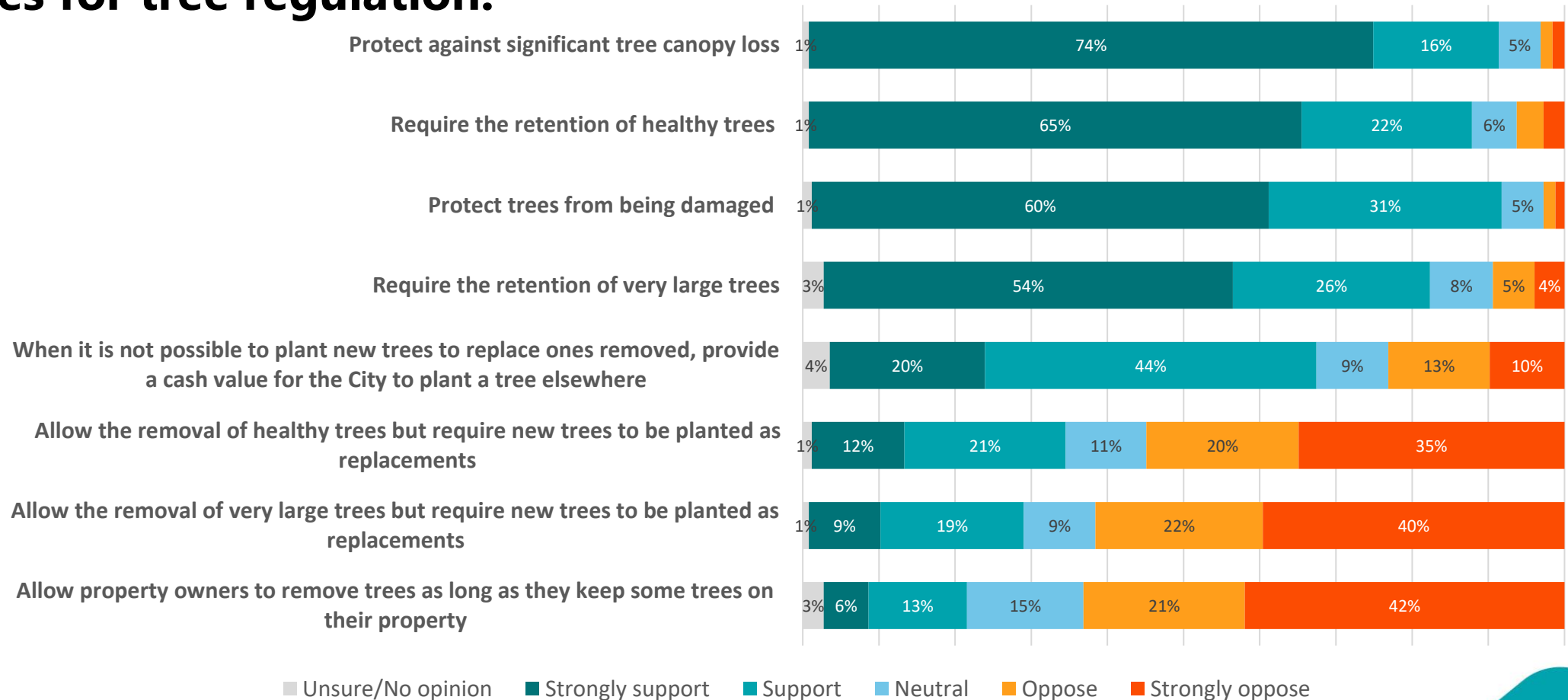
Phase 1 Engagement: Results

Canopy cover preference:



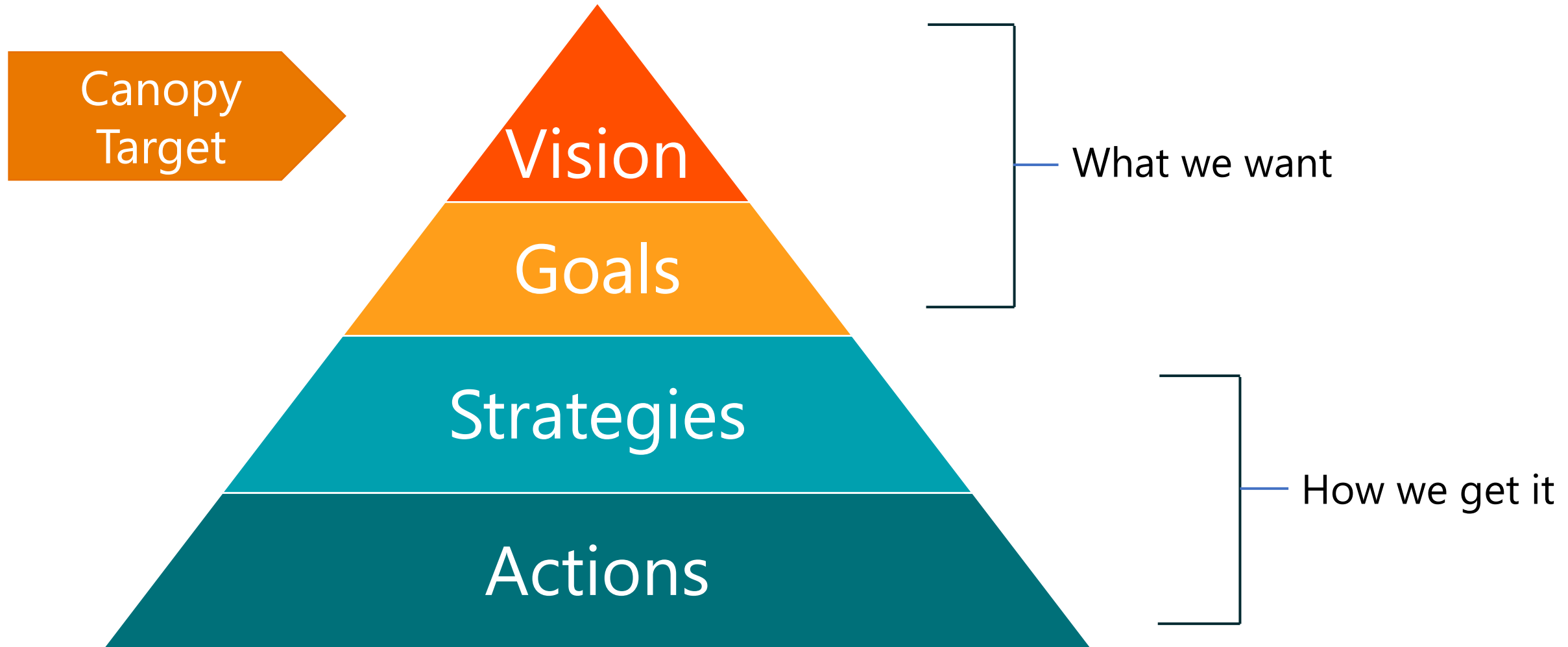
Phase 1 Engagement: Results

Priorities for tree regulation:



Draft Strategic Framework

Strategic Framework

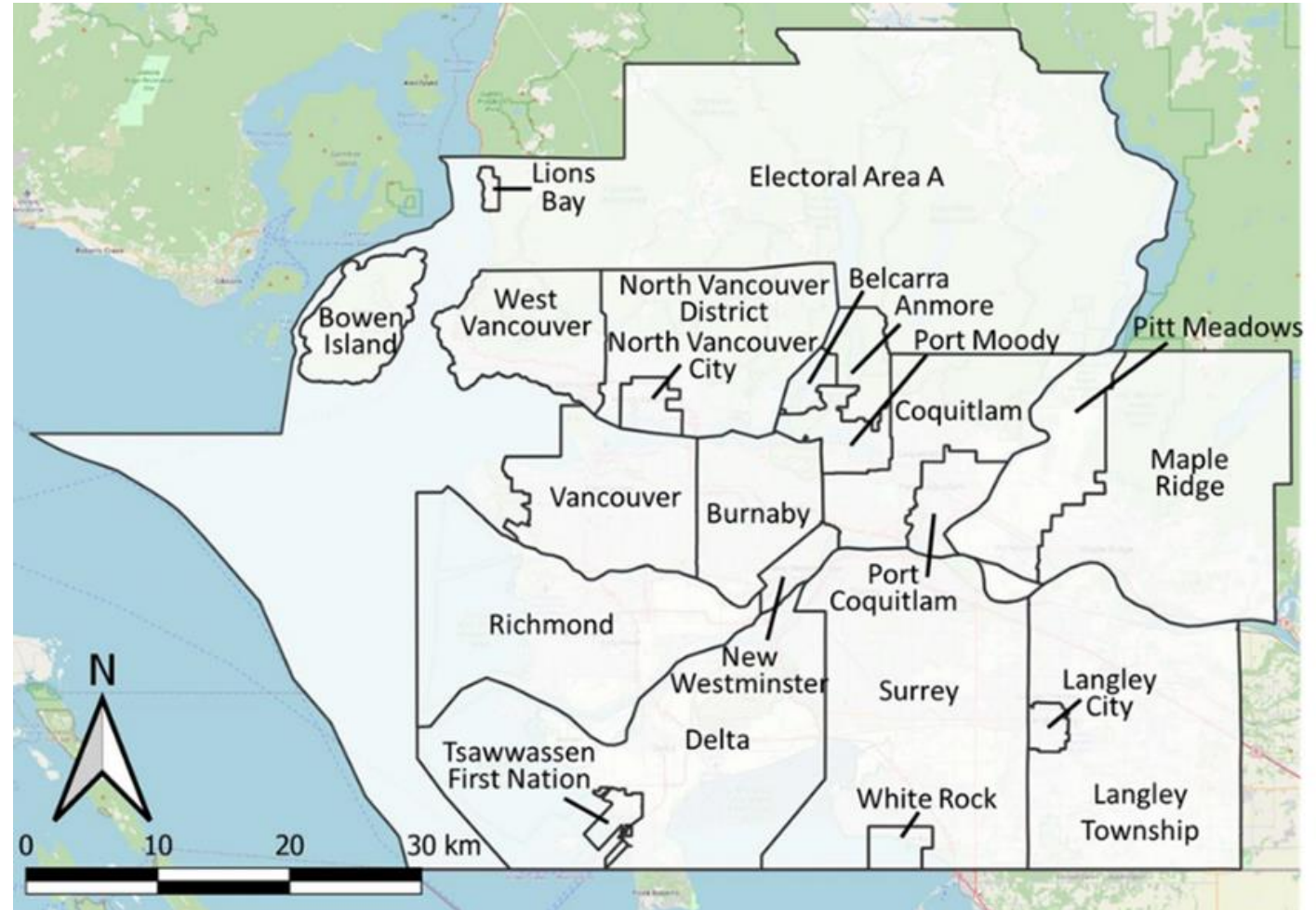


PROPOSED 20-YEAR VISION

Maple Ridge boasts a thriving, resilient, and climate-adapted urban forest that is essential to community health and well-being, provides high-value recreational opportunities, supports ecological health and biodiversity, offers cost-effective climate solutions, and improves livability for all residents.

Setting a canopy target

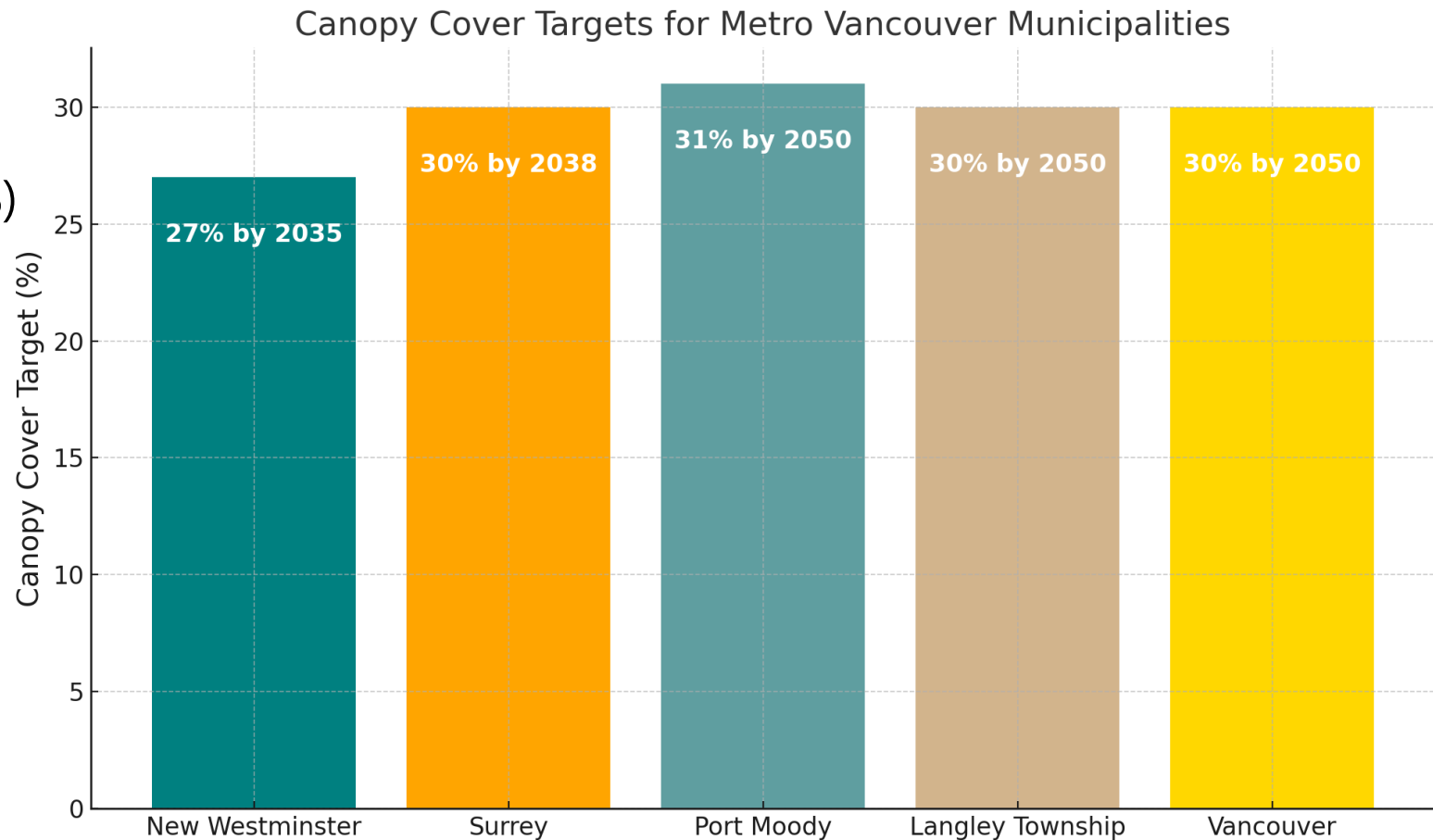
- Metro Vancouver has set a 2050 canopy **target of 40%** for the region's urban boundary



Setting a canopy target

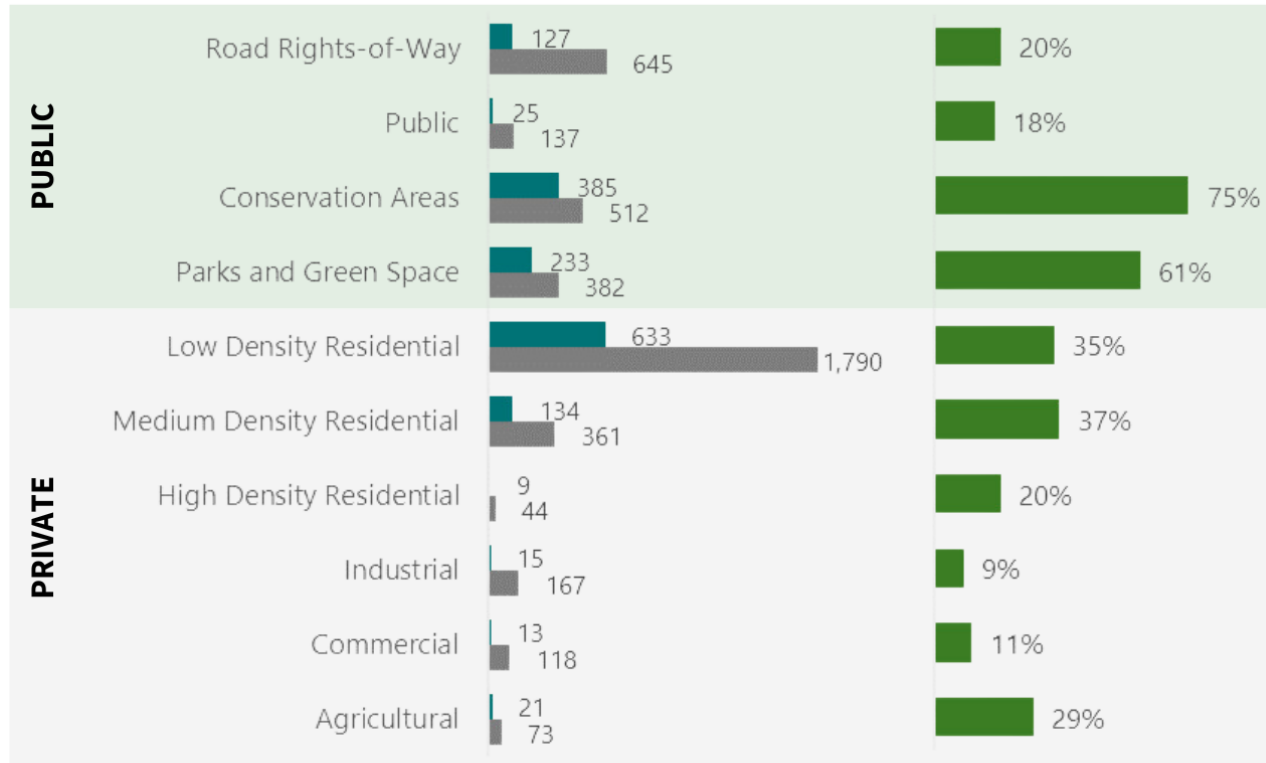
Current urban targets

- City of New Westminster (at 18%)
- City of Surrey (at 29%)
- City of Port Moody (at 28%)
- Langley Township (at 23%)
- City of Vancouver (at 23%)



Canopy Target

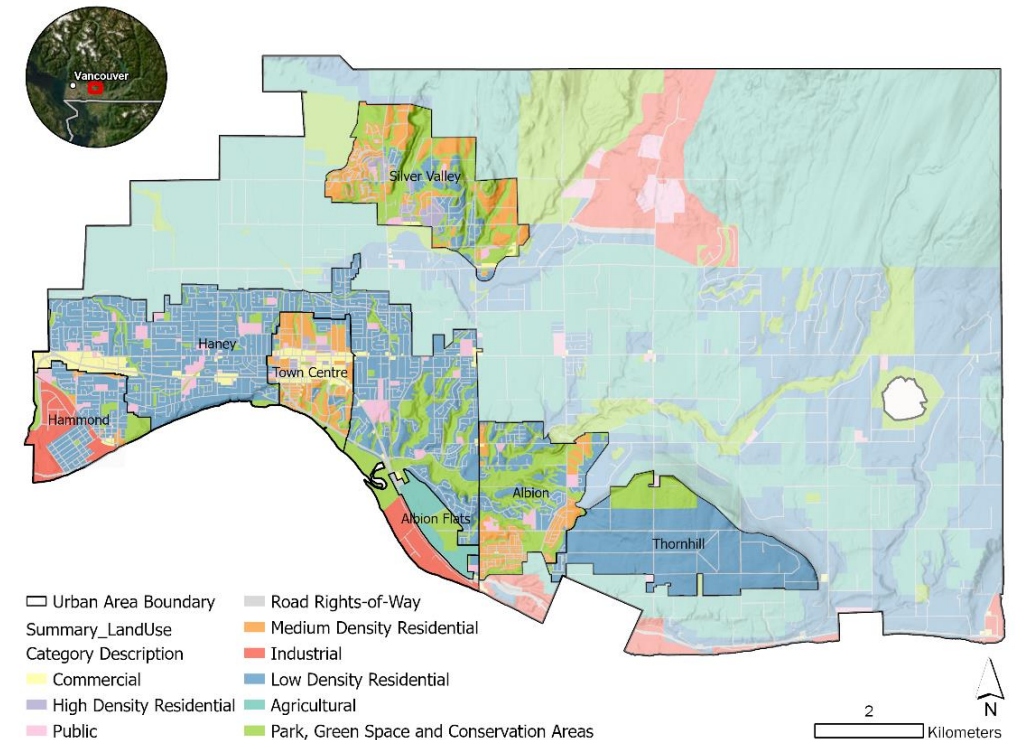
Current canopy cover (Urban Area Boundary)



■ Canopy Area 2022 (ha)

■ Land Use Area (ha)

■ Canopy Cover %



Canopy Target

- Regional context
- Past canopy changes
- Current status of canopy
- Projected trends



-  Scenario 1: Status Quo
-  Scenario 2: No Net Loss
-  Scenario 3: Canopy Gain



Canopy Target

- Regional context
- Past canopy changes
- Current status of canopy
- Projected trends



Scenario 1: Status Quo



Scenario 2: No Net Loss



Scenario 3: Canopy Gain

Recommended



Maple Ridge | mapleridge.ca



Draft Goals



1. Integrate and adapt the Urban Forest Management Strategy



2. Protect and expand the urban forest



3. Manage and sustain the urban forest



4. Engage and partner on urban forest management



Goal 1: Integrate and Adapt

- **Strategy 1** Integrate urban forest management planning into City and regional strategic initiatives
- **Strategy 2** Achieve funding and staffing levels sufficient to implement the Urban Forest Management Strategy
- **Strategy 3** Track and report progress and changes to inform adaptive management

Action example – Develop canopy targets by neighbourhood and by park class. Incorporate the targets as policy objectives into the OCP and other relevant policies and tools in neighbourhood plans.



Goal 2: Protect and Expand

- **Strategy 4** Update bylaws, policies and guidelines to protect and expand the urban forest
- **Strategy 5** Protect and restore forest lands to support biodiversity and healthy ecosystem functioning
- **Strategy 6** Plant trees to expand the urban forest to improve climate resilience and equity

Action examples – Introduce tree density and/or tree canopy minimums into planning tools such as the Zoning Bylaw and Development Permit Areas, update the Tree Protection and Management Bylaw to require additional compensations for the removal of trees



Goal 3: Manage and Sustain

- **Strategy 7** Align levels of service for urban forest management with best practices
- **Strategy 8** Manage trees for health and public safety

Action examples – Develop a biodiversity strategy to set conservation targets and guide future land acquisition and restoration processes
Integrate urban forest assets into the City's asset management system



Goal 4: Engage and Partner

- **Strategy 9** Engage the community to enhance stewardship of the urban forest
- **Strategy 10** Foster partnerships with external groups to implement the Strategy

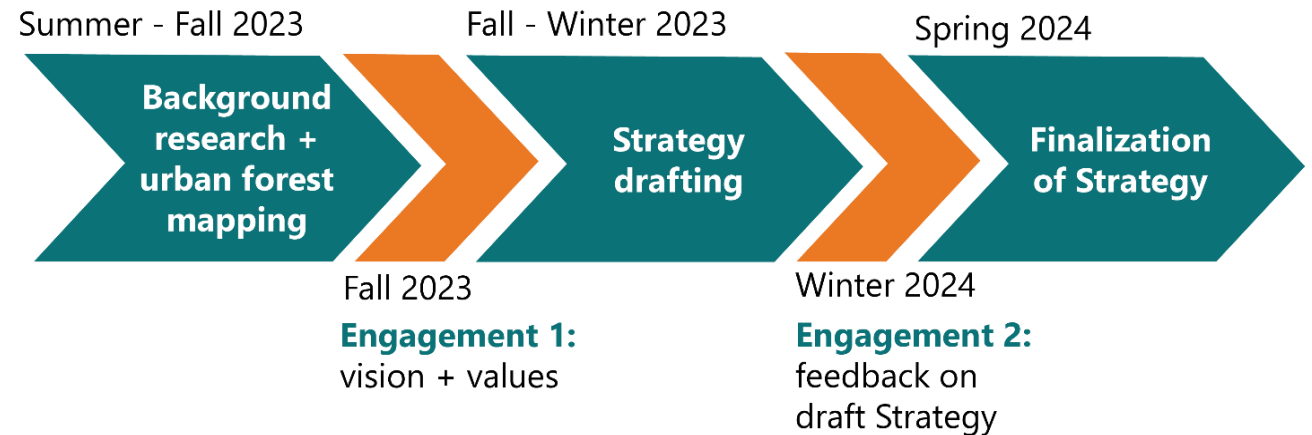
Action example – Develop a communications and stewardship plan that identifies key partners and associated resourcing requirements, explores opportunities to share key messages, and provides direction on how to engage community members in stewardship.



Next Steps

Next Steps

- Confirming the detailed actions
- Seek feedback from the community on the draft Strategy
 - Survey and Online open house
- Finalize the Strategy
- Final UFMS to Council



Thank you

Questions?

