



Urban Forest Master Plan Update

BARAAC
May 15, 2024

Outline

- Introduction
- UFMP Program Recap
- Key Program Risks
- Plan Recommendations
- Implementing the Plan
- Resource Considerations
- Q/A



Background

Program builds upon previous Urban Forest Master Plan – 2010

5 Key Areas:

1. Management and Implementation
2. Community Engagement and Stewardship
3. Protection and Preservation
4. Replenishment and Enhancement
5. Tree Health and Risk Management

What was missing

No Canopy Targets established

No implementation cost consideration



Management and Implementation ~ Community Engagement and Stewardship ~ Protection and Preservation

Replenishment and Enhancement ~ Tree Health and Risk Management

CITY OF BURLINGTON | URBAN FOREST MANAGEMENT PLAN | 2011-2030

JULY 2010



Background – Cont'd

Strategic Goals:


1. Increase Awareness
2. Foster engagement and stewardship
3. Transition from a reactive to proactive management paradigm
4. Improve resilience of trees and woodlands
5. Minimize risk presented by trees
6. Monitor and review the UF status
7. Ensure the UF is recognized as a critical municipal asset




Strategic Alignment – Vision to Focus



Focus Area 1 - Designing and delivering complete communities
Create all-inclusive, thriving, vibrant, healthy, connected, and safe communities



Focus Area 2 - Providing the best services and experiences
Deliver quality services to meet the diverse needs of our customers and foster the highest quality of life



Focus Area 3 - Protecting and improving the natural environment and taking action on climate change
Establish sustainable, healthy and low carbon climate resilient communities



Focus Area 4 - Driving organizational performance
Attract and retain high-performing employees to deliver the best services and experiences

Master Plan Alignment

Climate Resilient Burlington Plan

Integrated Mobility Plan

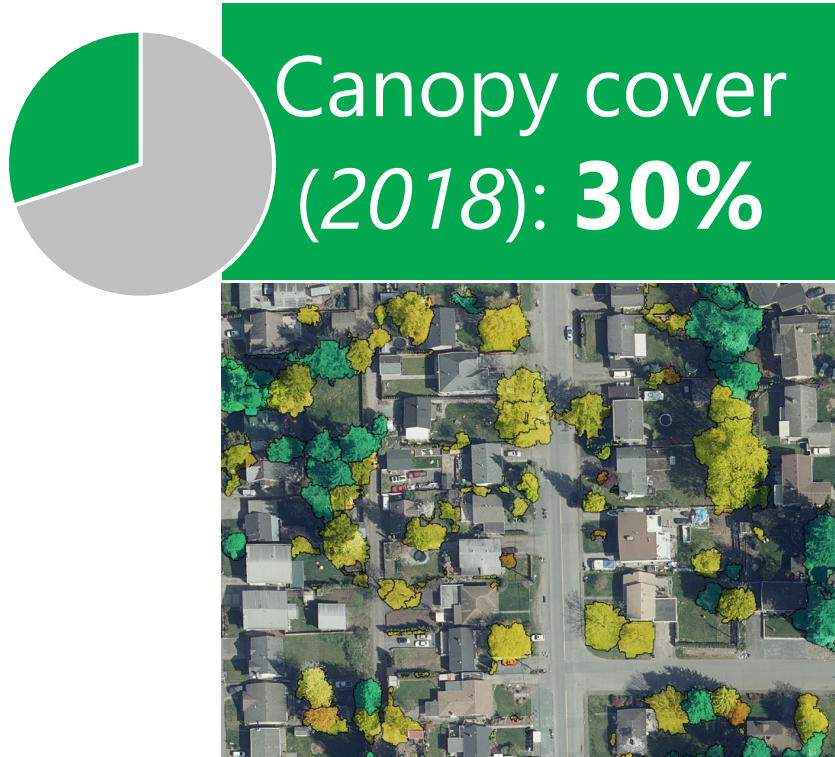
Park Provisioning Master Plan

Live & Play Plan

Complete Communities



State of the Urban Forest Update



- City-wide canopy cover at 30%
- Over 70,000 trees, 150 different species
- Canopy cover, hard surfaces, and surface temps are linked
- Green Infrastructure systems are complex: species, size, location, & mgt varies.
- AMP estimates replacement value of the UF at \$300M (NIC Woodlands)
- \$8.3 Million annual ecosystem services

Urban Forest Master Plan

Urban Forests Provide Value:

Cultural, Regulating, Supporting, Provisioning

The Community Cares:

Extensive Community Engagement

We can get better returns through more effective asset management

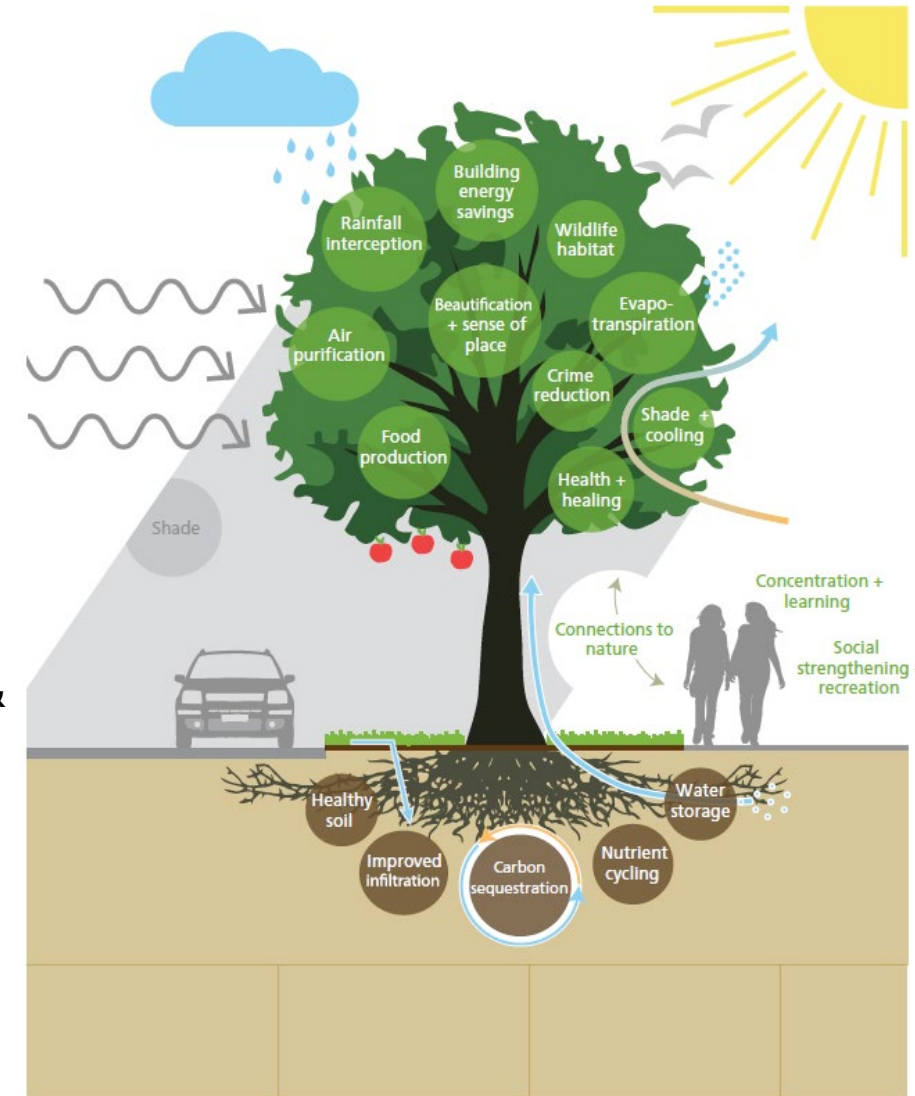
Strategic Vision to be updated based on data:

35% target extended to 2060. Recommend 30% target for urban areas & establish targets based on land use types.

Plan requires over 1,000 Ha of new canopy

Planting rate 4-5 times greater than 2022

4,600 new trees per year, plus 2 Ha of restoration annually

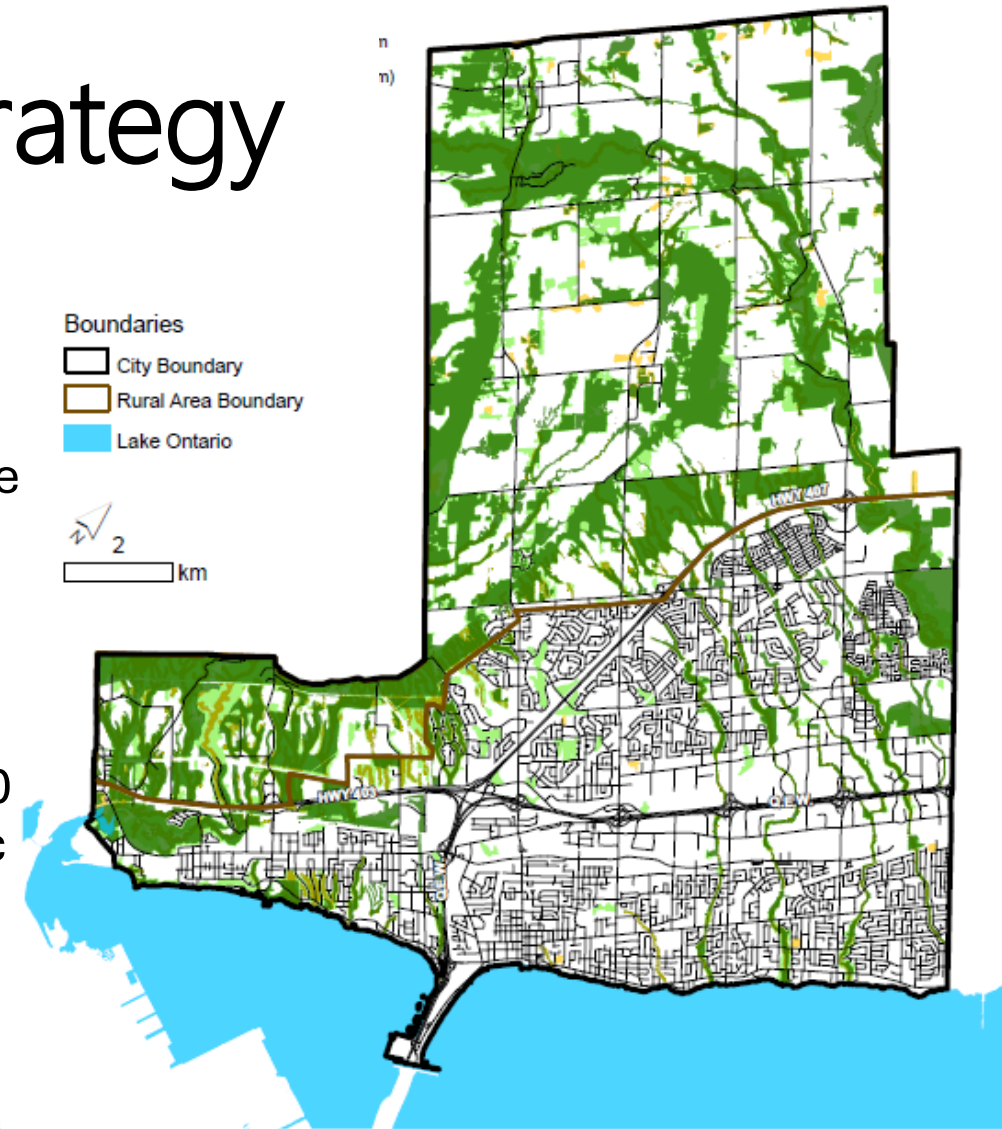


Woodland Management Strategy

No pre-existing management plan or established level of service

3,600 Ha Woodlands; City owns 9% or 285 Ha

- Woodlands contribute 65% of total canopy cover City-wide
- Rural Burlington: 3,040 Ha woodland (118 Ha City owned)
- Within Urban boundary: 575 Ha woodland (176 Ha City owned)
- City owned: More than 130 properties ranging from .5 to 30 Ha. Properties were consolidated into 37 functional public forests for purposes of FMPs (Fig. 1.6)
 - 312 km of property 'edge'
 - 14 km of trails



Community Engagement

2 Phases of Engagement

Get Involved Page Hub

Social media

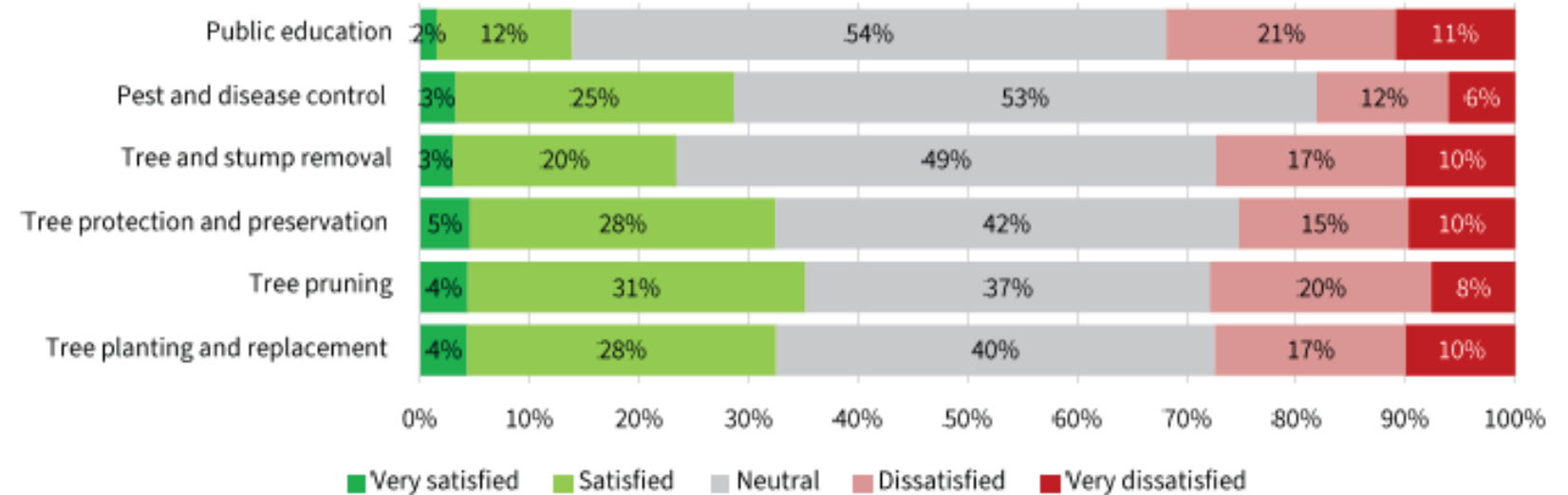
Hybrid PICs

In person workshops

Community Walks

Surveys

Program Satisfaction by Key Service Area



Key Program Risks

Public Safety (Duty of Care)

- Additional resources required to properly maintain all asset types

Environmental

- Climate Change & Extreme Weather
- Biodiversity & Invasive Species Management

Intensification & Growth

- Development & Urbanization
- Preservation of significant trees and woodlands

Reputational

- V2F targets unattainable with current program funding



Key Actions

1

MANAGE, IMPLEMENT, AND INTEGRATE

- Governance
- Program Capacity
- Asset Management
- Monitoring And Reporting

2

MAINTAIN AND MONITOR

- Pest and Disease Management
- Tree Maintenance
- Risk Management

3

ESTABLISH, REPLACE AND ENHANCE

- Better Planting Environments
- Increased Tree Planting
- Woodland Restoration and Biodiversity

4

PRESERVE AND PROTECT

- Private Tree Protection
- Public tree protection

5

ENGAGE AND COLLABORATE

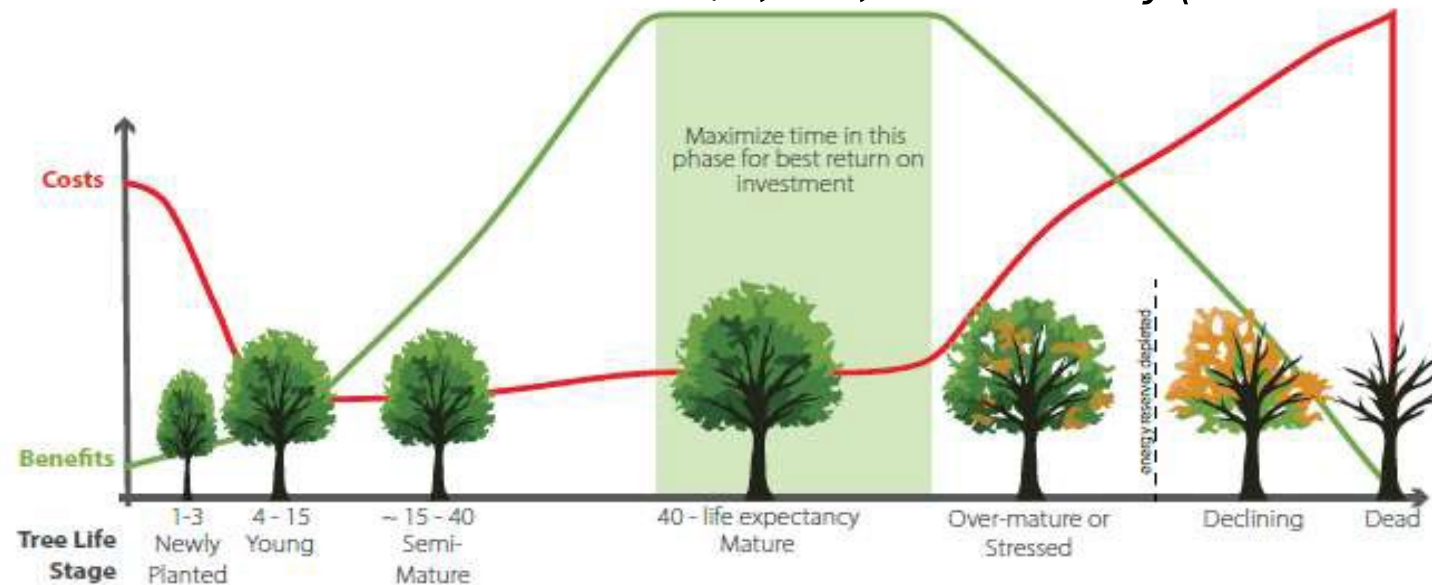
- Community Stewardship
- Community Education And Outreach



Focus Area 1

- 1) Optimize asset management by closing existing service level gaps and develop new programs for under-serviced age classes and asset types.

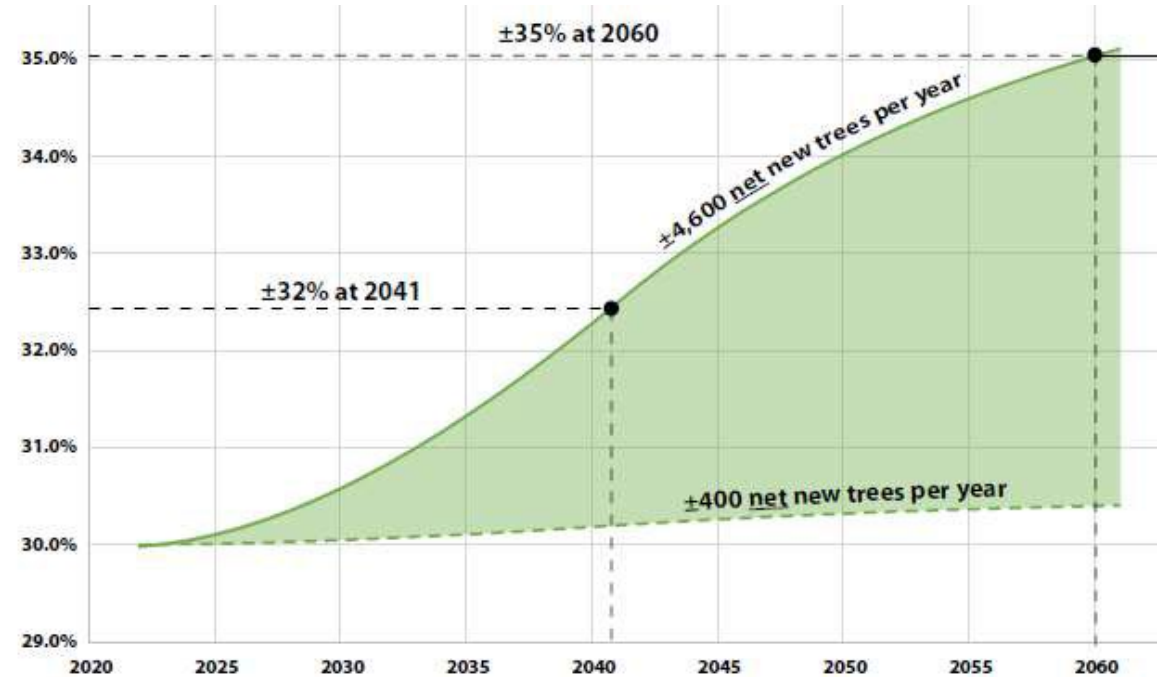
Estimated Resource Needs Over Ten Years: \$2,365,000 annually (includes 2.5 FTE)



Focus Area 2

2) Increase canopy cover on both public and private land including woodlands

Estimated Resource Needs: Estimated Resource Needs: \$2,390,000 annually (includes 2 FTE)



Focus Area 3

3) Develop best management practices to support proactive risk management, climate change mitigation and adaptation, and pest management.

Estimated Resource Needs: \$110,000 (1 FTE)



Tree damage following a severe storm on May 21, 2022.

Tree management, including risk assessment and reliable preventative maintenance (e.g. pruning), can greatly reduce the probability of catastrophic tree failure, such as that shown.



Focus Area 5

5) Improved data analytics to support data quality and analytics for strategic decision making, leveraging the use of remote sensing and AI technologies.

Estimated Resource Needs: \$80,000 (includes .5 FTE)



Funding Offset Opportunities

- 1) Consider new trees (and costs associated with 5-year establishment) as a Capital Program. Starting in 2025, allocate a % of the capital levy to support tree planting and establishment practices.
- 2) Incorporate annual funding from the EAB program (**\$860,000**) which is estimated to be completed by the end of 2024 into the annual Forestry base operating budget in 2025. This funding will help to close service level gaps (grids; stumping; park PM program; rural; woodlands; planting)
- 3) Estimate 40% cost recovery from grant opportunities to offset tree planting program costs (e.g. 2 Billion Tree Program; Federation of Canadian Municipalities Growing Canada's Community Canopies Fund) (**\$950,000**)
- 4) Pursue cost-sharing through Public-Private Partnerships

Estimated total funding offsets will be approximately \$1,800,000



Resource Requirements: Ten Year Forecast

Description	Annual Budget	Funded/Unfunded
Current Forestry Program Base Budget	\$4,510,000	Funded
Current Annual EAB budget	\$860,000	Funded
1) Close Service Level Gaps	\$2,365,000	Unfunded
a. Urban Right-of-Way Tree Pruning	\$500,000	
b. Juvenile Tree Maintenance	\$500,000	
c. Stumping	\$300,000	
d. Parks Tree Pruning	\$200,000	
e. Rural Right-of-Way Tree Pruning	\$100,000	
f. Woodland maintenance	\$400,000	
2.5 FTE	\$365,000	
2) Increase Canopy Cover	\$2,390,000	Unfunded
a. 4,000 public/private trees:	\$1,800,000	
b. 6,000 woodland	\$360,000	
2 FTE	\$230,000	
3) Proactive Risk Mgt, Biodiversity Strategy, Climate Change Mitigation	\$110,000	Unfunded
1 FTE	\$110,000	
4) Community Outreach	\$110,000	Unfunded
1 FTE	\$110,000	
5) Improved Data Mgt & Analytics	\$80,000	Unfunded
.5 FTE	\$80,000	
Total UFMP Requirements (Includes estimated HR costs)	\$5,055,000	





Thank You!

