Urban Forest Master Plan Priority Implementation Plan

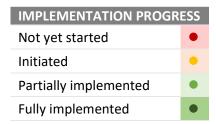
The Urban Forest Master Plan's implementation plan lays out detailed actions to achieve priority recommendations. Priority actions have been identified for the next five years and beyond using the principles of asset management, as well as external factors and dependencies for implementation:

- **Maximizing benefits** with actions that have the biggest impact on carbon neutrality as well as urban heat island and stormwater interception for climate adaptation;
- Reducing risks to the asset as well as financial risks associated with the implementation of the
 actions;
- **Providing satisfactory levels of service in a sustainable manner**, including the ability to maintain the asset and the ability to deliver permits in a timely matter;
- Acknowledging external factors to Urban Forest Services such as political directives for the climate emergency, active planning processes etc. that have timelines that require actions to be implemented now; and
- Accounting for **dependencies**, where a particular action must be completed before another action.

The actions are divided into the following management categories:

- Resourcing: human resources and budgeting
- Tree protection: strengthening protection of existing public and private trees
- Monitoring: setting targets and collecting data to assess and report on urban forest changes
- Tree planting: new tree planting and planting conditions
- Tree management: urban forest operations to maintain the urban forest
- Stewardship: citizen involvement in the management of the urban forest

This document includes the summary of actions to be undertaken between 2019 and 2024, as well in the longer-term. Each action references the Urban Forest Master Plan recommendation(s) it relates to and reports current implementation progress as:



2019/2020 Actions		Progress			
RESOU	RCING				
1.	Hire a Manager of Urban Forest Services and an Urban Forest Planner. (A)	•	•	•	•
2.	Develop a set of actions to implement the Urban Forest Master Plan, key performance indicators and an implementation progress dashboard. (B)	•	•	•	•
3.	Define levels of service for urban forest management and measure the gap in current operating budgets. (I)	•	•	•	•
TREE P	ROTECTION				
4.	Review and update of the Tree Preservation Bylaw and create material to clarify the new requirements. (Q)	•	•	•	•
5.	Audit the current role of Urban Forest staff in the development permit and bylaw review processes to identify procedural efficiencies. (Q, Z)	•	•	•	•
6.	Develop and implement City tree and planting site protection protocols. (E)	•	•	•	•
7.	Update warranty and inspection requirements for contractor- and developer- planted City trees (O)	•	•	•	•
моніт	ORING				
8.	Measure city-wide tree canopy cover (LiDAR) and re-measure every 4 years. (H)	•	•	•	•
9.	Measure urban forest ecosystem services and re-measure every 4 years. (H)	•	•	•	•
10.	Establish targets for tree canopy cover, impermeable surfaces and planting opportunities across the city. (D)	•	•	•	•
TREE P	LANTING				
11.	Develop area planting plans to prioritize and guide tree planting across the City to achieve canopy cover targets. (D, N)	•	•	•	•
12.	Host interdepartmental workshops to identify project and funding options to meet the goals of the UFMP and other City strategies or plans. (P)	•	•	•	•
STEWA	RDSHIP				
13.	Develop and implement a citizen stewardship plan. (D, O, S, H, U)		•	•	•

^{*} Italicized actions will continue into the next time period.

Note: letters in brackets indicate the associated UFMP recommendation the actions align with.

2021/2	22 Actions		Progress				
RESOUI	RCING						
1.	Develop a 5-year budget and resourcing plan to transition urban forest management operations to the desired levels of service. (K)	•	•	•			
2.	Pending the outcomes of the Tree Preservation Bylaw updates, explore resourcing or technology options to improve the tree removal permit process. (Z)	•	•	•			
3.	Analyze life cycle costs of urban forest management activities. Track and report costs annually to improve budget accuracy. (I)	•	•	•			
4.	Enter tree assets and vacant sites into the City's asset management register and assign costs budget for replacement planting. (I)	•	•	•			
TREE PI	ROTECTION						
5.	Audit the current role of Urban Forest staff in the enforcement of the Tree Preservation Bylaw to identify procedural efficiencies (Z)	•	•	•			
MONIT	ORING						
6.	Maintain the geospatial tree inventory of public trees and vacant sites. (J)	•	•	•	Ī		
7.	Provide the tree inventory, canopy cover, ecosystem services values and other urban forest data on a public map viewer and Open Data system. (H)	•	•	•			
TREE PI	ANTING						
8.	Work with the Engineering Department to explore Subdivision and Development Servicing Bylaw updates to improve street tree planting outcomes. (C)	•	•	•			
9.	Work with the Engineering Department to explore how to use the urban forest to achieve stormwater management plan objectives and vice-versa. (C)	•	•	•			
TREE M	ANAGEMENT						
10.	Develop an Urban Forest Operations Manual to guide internal processes, procedures and service levels. (K)	•	•	•			
11.	Collect statistics on current tree risk claims by area, species and age or size class, and maintenance history. (L)	•	•	•			
12.	Define risk assessment areas for inspection at more frequent intervals. (L)	•	•	•			
STEWA	RDSHIP						
13.	Work with the Engineering Department to explore the inclusion of credits for tree canopy in the Stormwater Utility Fee's Rainwater Rewards Program. (C)	•	•	•			

Note: letters in brackets indicate the associated UFMP recommendation the actions align with.

2023/24 Actions		Progress				
TREE P	ROTECTION					
1.	Consider developing an internal City policy with a target for no net loss of greenspace on City projects. (E)	•	•	•	•	
2.	Explore opportunities to participate in initiatives to quantify the value of green infrastructure services in municipal asset management systems. (H)	•	•	•	•	
МОИІТ	ORING					
3.	Track poorly performing species using the tree inventory data.	•	•	•	•	
4.	Update LiDAR City-wide canopy cover, and re-measure every 4 years. (H)	•	•	•	•	
5.	Update urban forest ecosystem services and re-measure every 4. (H)	•	•	•	•	
TREE N	1ANAGEMENT					
6.	Develop a City Tree Policy that guides decisions regarding requests for maintenance or removal and replacement requirements. (C)	•	•	•	•	
7.	Maintain regular communication with agencies that track pests and diseases. (M)	•	•	•		
8.	Train staff to identify pest and disease threats. (M)	•	•	•	•	
9.	Develop and implement a tree risk management policy (L)	•	•	•	•	
10.	Develop a young tree pruning program (O)	•	•	•	•	
STEWA	RDSHIP					
11.	Explore the creation of a grant program to encourage people to designate trees as significant and access funds for tree maintenance. (R)	•	•	•	•	
12.	Enable voluntary covenants to be placed on significant trees by private property owners. (R)	•	•	•	•	

Note: letters in brackets indicate the associated UFMP recommendation the actions align with.

Longer term implementation

The following actions will serve to further advance the implementation of the Urban Forest Master Plan beyond the next five years.

• Tree protection:

- 1. As strategies are developed or updated and in partnership with other departments, explore opportunities to incorporate the goals, policy objectives and strategies of the UFMP. (C)
- 2. Develop a Biodiversity Strategy to define and guide the protection of a green infrastructure network. (F)
- 3. Develop natural area restoration plans for public greenways and natural areas that are prioritized through the Biodiversity Strategy. (G)

• Tree planting:

4. Explore options for increasing the genetic diversity of City trees. (N)

• Tree management:

- 5. Identify mature trees in poor health or with low Useful Life Expectancy and prioritize them for health treatments. (M)
- 6. Plan for succession in streets and parks by estimating the useful life expectancy of tree assets and assigning budget to the renewal of those assets over time. (E)
- 7. Define acceptable risk mitigation options for retaining old trees. (M)
- 8. Develop an Integrated Pest Management Plan. (M)

• Stewardship:

9. Conduct an inventory with the help of volunteer citizens (citizen science) to obtain a more comprehensive estimate of City-Wide ecosystem services on public and private land. (H)

Conclusion

The above implementation plan provides the City with a roadmap towards achieving the goals and objectives set out in the Master Plan. The prioritization of these actions responds to the climate emergency by prioritizing actions that maximize the benefits for climate adaptation and mitigation produced by the urban forest and minimize the risks to urban forest assets.