

Richmond Hill

Integrating Asset Management **Principles into Green** Infrastructure Management – A **Richmond Hill approach**



June 25, 2019

Agenda

- 1. AM Journey at Richmond Hill
- AM Strategy Adaptation to a Municipal Context
- 3. Green Infrastructure Asset Management
- 4. Alignment of Framework Processes
- 5. Next Steps



Asset Management Journey at RH



The Corporate Asset Management Section sits within Corporate Asset Management and Environment Services Division

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How are we preparing?

To develop an **Asset Management (AM) System** to meet new O. Reg. 588/17 and build a robust AM Program for the City.

- **AM Policy** outlines the City's principles and commitments to Asset Management planning;
- AM Strategy outlines business processes and practices to implement the Policy; and,
- Future Asset Management Plans (AMPs) report on the state of infrastructure and disclose operational and financial strategies to meet required service levels.



AM Strategy

- Adopted IAM Framework (international standard)
- Identified municipal business processes to implement the AM Strategy by AM Framework category





Current Approach AM Reporting of Green Infrastructure

- The City's Asset Management Plan, adopted in 2016, recognizes trees and natural areas as valuable environmental assets.
- Includes Street Trees and Natural Assets (woodland, wetlands), but not Park Trees
- Value based on replacement or restoration cost (per tree or hectare)
- Condition based on tree health (dead branches, and species composition for example dominance of ash trees)



Examples of Green Infrastructure

Streets

Parks

Natural areas







What is the urban forest?

Private Residential



Commercial/ Institutional



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RH's Green Infrastructure Assets

Table 18: Environmental Assets Inventory and Current Value			
Asset Class	Replacement Cost (2014 dollars)	Quantity	Data Confidence
Street Trees	\$13.4 M	43,217 trees	Intermediate
Natural Areas - Forest	\$74.2 M	696.2 hectares	Intermediate





RH's Green Infrastructure Assets





Green Infrastructure Management Practices

- Complete street and park tree inventory and an active process to update data as part of tree maintenance
- Inter-departmental approach to management (Planning, Public Works, Environment Services)
- Policies and By-laws exist to protect the Urban Forest





Green Infrastructure Practices

- Good tree establishment practices and successful community-based programs
- Strong partnerships (TRCA, Ontario Streams, MNRF, York Region, LEAF, TD Friends of the Environment)
- Emerald Ash Borer (EAB) Management Strategy





Preparing for the AM Plan Update

- Align current practices to an AM Framework to create a consistent approach for all infrastructure, while minimizing additional effort
- Incorporate future AM activities within Green Infrastructure Initiatives – such as draft Urban Forestry Master Plan



AM Strategy and Planning

- YR Forest Management Plan (2016)
 - Sets canopy cover targets for municipalities
- Richmond Hill Official Plan (2010)
 - Increase tree cover in settlement areas, sets a cover target of 25%
- Strategic Plan (2009)
 - Increase urban tree canopy on public and private property (Wise mgmt. of resources)
- Environment Strategy (2014)
 - Establish an Urban Forest Mgmt. Plan



AM Strategy and Planning

Urban Forest Management Plan (2020) will outline a long-term, strategic approach to protect, maintain and enhance the urban forest and its *services*



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AM Decision-Making

- Setting Customer Levels of Service - City – wide Total Canopy cover target to 25% in Official Plan
- Trees and natural areas management to ensure costeffective forest management over the long term.
- Future Activity: City-wide planting prioritization tool





Lifecycle Delivery Activities

- Setting Maintenance Standards and Strategies:
 - planning tree planting
 - reviewing development applications
 - good tree establishment practices
 - pruning cycles
 - managing pests and diseases.
- Natural Areas Restoration
- Partnership with capital projects for example,
 David Dunlop Observatory Park
 Richmond Hi



Asset Information Enablers

- Richmond Hill's geospatial inventory:
 - 73000 city and park trees (includes species, size, height, location and general condition rating)
- The Natural Area Inventory and Assessment (TRCA) - includes mapping of vegetation communities and inventories of plants and animals.



Organization and People

- Strong working relationship between forestryrelated functions – facilitated by common tools and procedures.
- Strong partnerships (TRCA, Ontario Streams, MNRF, York Region, LEAF, TD Friends of the Environment)
- Community Partnerships
- Future action promote and enhance understanding of urban forest functions



Risk and Review

- EAB Strategy management of sick or vulnerable trees
- Plant more resilient species – protect against pests and climate change
- Monitoring programs





Next Steps

- Continue to foster alignment between forestry asset management and master planning activities
- Continue to build tools and information to improve management of green assets
- Promote benefits and value to the Community – Levels of Service
- Build up the pieces of the AM plan



Closing



Thank you for your time

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