



MEMORANDUM

TO: Mayor Lawlor and Members of Council

FROM: Catherine Edwards, Environment and Natural Assets Specialist

DATE: October 11, 2024

MEMO NO.: CSE-2024-008

SUBJECT: Green Infrastructure Asset Management Plan Update

PURPOSE OF THE MEMORANDUM:

The purpose of this memorandum is to provide an update on the status of the development of the Town's Green Infrastructure Asset Management Plan.

BACKGROUND:

Green infrastructure can be defined as natural or human-made elements that perform ecological and hydrological functions and processes providing society with a multitude of economic, environmental, health and social benefits. This includes natural assets (e.g. forests, wetlands, lakes), enhanced assets (e.g. street and park trees, mown lawns, pollinator gardens), and engineered assets (e.g. soil cells, permeable paving, green roofs).

Green infrastructure assets greatly contribute to the quality of life of the Town's residents, helping make Halton Hills a desirable place to live, work and play. Some of the many benefits associated with these assets are services related to flood mitigation, carbon sequestration, air filtration, beautification, and opportunities for the public to access greenspace and outdoor recreation. These values support the Town's Strategic Plan, contributing to social and community wellbeing as well as environmental health and resilience, and Council's vision of Halton Hills being a nature-rich community.

The Town of Halton Hills is mandated to develop and implement a Corporate Asset Management (CAM) Program for all Town-owned infrastructure and assets in order to be in compliance with the Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure. This regulation explicitly identifies the inclusion of "Green Infrastructure Assets" as part of the requirement.

Similar to grey infrastructure such as bridges, roads and culverts, green infrastructure assets are associated with costs, risks and service delivery. For that reason, it is very important to apply the principles of asset management planning to green as well as grey infrastructure.

However, unlike grey infrastructure, green infrastructure assets derive services from biological and environmental functions, resulting in service levels that may increase over time through natural growth and appreciate in value. Many natural assets do not have an end-of-life date and can be self-regenerative with protection and minimal management (e.g. mature woodland).

The Town's Corporate Asset Management policy was updated in 2024 to ensure the integration of natural assets and green infrastructure, consistent with legislative requirements. To address the significant differences between green infrastructure and grey infrastructure and to meet the 2025 legislated requirements, a dedicated Green Infrastructure Asset Management Plan needs to be developed, subject to 2025 budget approval.

COMMENTS:

While green infrastructure asset management is an emerging field worldwide, some best practices have been established in Canada that are consistent with traditional asset management principles. The Town is following the framework established by the Natural Assets Initiative (Figure 1). Preliminary work to advance Step 1 of the framework was completed in 2023 through an initial project with Credit Valley Conservation and natural asset management consultants. The methodology from this project is being refined, and will be expanded to complete the inventory and assessments for remaining Town-owned green infrastructure assets in the following categories:

- Natural Assets
 - Forest
 - Wetland
 - Meadow
 - Open water
- Enhanced Assets
 - Street trees
 - Park trees
 - Manicured open areas
 - Garden beds

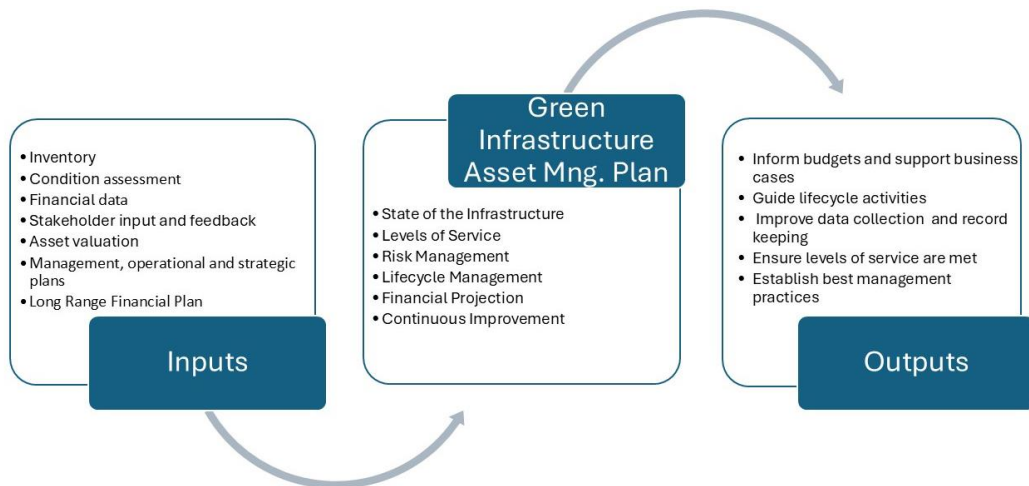
Engineered assets (e.g. cisterns, permeable pavement) and grey infrastructure are not included in the scope.

Figure 1. Natural/Green Infrastructure Asset Management Framework (Natural Assets Initiative)



Following this framework, the Town’s Green Infrastructure Asset Management Plan (GIAMP) will help guide the proactive and strategic management of the Town’s green infrastructure and be used to inform data-driven budgets, guide lifecycle activities, improve data collection, and establish best management practices to ensure that levels of service are met. The plan will reflect applicable corporate plans, strategies and projects (e.g. Fairy Lake Water Quality Study), and document the Town’s current operating practices while identifying potential improvements related to processes, resourcing and data collection (Figure 2).

Figure 2. Halton Hills Green Infrastructure Asset Management Plan Contents, Inputs and Outputs



Developing the GIAMP will be a collaborative and cross-departmental initiative. The Natural Asset Management Team, made up of staff representatives from multiple departments, will provide overall project guidance. Staff and various stakeholders will be engaged throughout the development of the plan. A series of workshops and meetings will take place to engage the public, staff, Council, the Strategic Plan Implementation Committees, and the Mayor's Priority - Black Creek Advisory Group.

Contingent upon 2025 budget approval, work will begin in Q1 2025, supporting the development of current and target Levels of Service, a lifecycle management approach, risk assessment, as well as a financial strategy considering future demand and growth.

The key components of the plan will be in draft form by July 2025, meeting the Ontario Regulation 588/17 deadline. The final Green Infrastructure Asset Management Plan will be completed by the end of 2025.

The development of the Green Infrastructure Asset Management Plan will be an iterative and collaborative process. The scope of the plan may evolve over time in response to stakeholder input and lessons from implementation.

CONCLUSION:

The development of the Green Infrastructure Asset Management Plan will ensure that the Town is compliant with legislation. It will also deliver on the priorities of Council's Strategic Plan. Implementing Green Infrastructure Asset Management at the Town will contribute to the quality of life in Halton Hills, helping to make the Town an ideal place to live, work and invest.

Reviewed and approved by,

Michelle Bourdeau, Manager of Environment & Climate

Kevin Okimi, Director of Parks, Community Development & Environment

Damian Szybalski, Commissioner of Community Services

Chris Mills, Chief Administrative Officer