Climate Action Partnership

CLIMATE ACTION COUNCIL

Valuation of Ecosystem Services Webinar Summary

April 7, 2026 | Webinar Recording

Valuing ecosystem services helps municipalities recognize the real benefits that natural systems provide, benefits that often go unnoticed because they are not traditionally captured in financial or asset management planning. When municipalities quantify these services, they can communicate the value of natural assets, support decision-making, justify investments, and reduce costs. In this webinar, Megan Price from City of Toronto and Tracy Timmins from TRCA spoke about a study to Value Ecosystem Services in Toronto's Parks, Golf Courses, and Open Green Spaces, including its development and findings, and municipal challenges and opportunities of using the results.

Presenters

- Megan Price | City of Toronto
- Tracy Timmins | Toronto and Region Conservation Authority

Presentation Overview

- In 2025, Toronto City Council adopted a Climate Change Resilience Work Plan. Staff were directed to incorporate natural assets into the City's asset management.
- A collaboration between City of Toronto and TRCA sought to value the ecosystem services provided by City owned natural assets using the Ecosystem Services Valuation framework to identify and monetize benefits residents receive from nature (e.g., clean air, water filtration).
- A multidisciplinary team, including experts from the University of Waterloo and Green Analytics, worked to develop the technical reports and mapping tools.
- A primary objective of the project was to map services to support natural asset management planning and climate resilience, focusing on City-owned property (8,000 hectares of parks, golf courses, green spaces).
- Total economic value: The study estimated that City-owned natural assets provide a minimum of $7.7 billion annually.
- The most significant service was identified as Stormwater Retention, with an approximate value of $6.7 billion (calculated using the replacement cost methods – which estimates how much it would cost to build engineered infrastructure providing the same level of service).
- City-owned assets were estimated to value approximately $817.7 million in carbon storage and $11.3 million in annual in sequestration.
- To conduct site-specific analysis, an internal ArcGIS Mapping Tool was developed to calculate the quantity and economic value of services. Users can:
    - Look at water quality and water retention benefits;

    - Explore spatial data and look at specific neighbourhoods;
    - Delineate natural assets by type and subtype (e.g., distinguishing between deciduous and coniferous forests to provide more accurate sequestration data);
    - Compare value between sites.
- Certain ecosystem services were not assigned monetary value (e.g., water quality and habitat suitability) due to difficulties accurately ascribing economic value to these services and determining whether it is appropriate to assign a dollar value to specific services.
    - While these services were not monetized, water quality indicators (such as avoided transport of phosphorus and suspended solids) were still quantified and mapped as part of the broader study.
- The findings can serve as a communication tool to justify investments in green infrastructure, highlight the negative impacts that a loss of park or green space might have on a community, and demonstrate that municipalities can be using and integrating natural assets into asset management planning.

Resources

- City of Toronto Climate Change Resilience Workplan
- Toronto City Council Item: Progress and Priorities for Enhancing Toronto's Climate Resilience
- Valuation of Ecosystem Services in Toronto's Parks, Golf Courses, and Open Green Spaces Report

Contact Information

Please reach out to us at any time with questions, input, or for additional information.

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