The Regional Municipality of York

Committee of the Whole Environmental Services May 4, 2023

Report of the Commissioner of Public Works

2022 Regional Greening Strategy Achievements

1. Recommendation

The Regional Clerk circulate this report to the Clerks of local municipalities, Chippewas of Georgina Island First Nation, Environment and Climate Change Canada, Natural Resources Canada, Ontario Ministry of Natural Resources and Forestry, Ontario Ministry of Environment, Conservation and Parks, Lake Simcoe Region Conservation Authority, and Toronto and Region Conservation Authority.

2. Summary

This report updates Council on activities and significant Greening Strategy achievements for 2022.

Key Points:

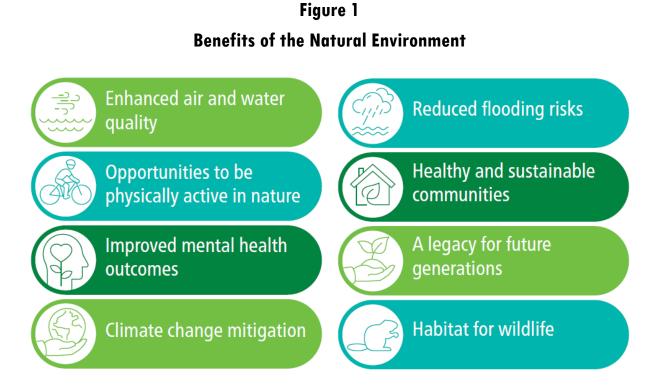
- The increased uptake and participation in Greening Strategy programs reflects recovery from impacts of the COVID-19 pandemic
- In 2022, the Greening Strategy resulted in planting 110,391 trees and shrubs, securing 13.7 hectares of land for conservation, inspiring residents through 123 events and leveraging over \$2.27 million in external funding
- Progress was made on key Disaster Mitigation and Adaptation Fund (DMAF) deliverables, including planting 26,531 trees and shrubs in urban areas and planting 22,470 seedlings on land secured through DMAF
- Advances were made on implementing the York Region Forest Management Plan medium-term actions (2020-2026) with 18 completed or in progress including the Region's Tree Planting Prioritization Tool and forest study reports for Richmond Hill and Markham
- Spongy Moth populations in the Region collapsed in 2022, and staff expect little to no tree defoliation in 2023

3. Background

Greening Strategy contributes to creating and maintaining sustainable natural environments and communities

Since its adoption in 2001, the Greening Strategy has been used as a tool to realize the Region's priorities under the Sustainable Environment area of focus. The Greening Strategy contributes to mitigating and adapting to climate change and supports the Region's Climate Change Action Plan. Delivery of the Greening Strategy is achieved through partnerships and on-the-ground actions that protect and enhance the natural environment including trees and forests, pollinators, streams and wetlands, grasslands, and other habitats. Through refinements in 2012 and 2022, the strategy continues to evolve and meet the needs of York Region's residents and objectives laid out in the Regional Official Plan.

Green infrastructure, including trees, forests, and other natural features, provide an array of environmental and health benefits to residents (Figure 1) that support York Region's Vision.



Greening Strategy implementation demonstrates on-the-ground results and opportunities for residents to get involved

Delivered through four action areas, Environmental Land Protection and Preservation, Enhancement and Rehabilitation, Community Stewardship and Education, and Innovation and Knowledge, the Greening Strategy has resulted in planting more than 1.7 million trees and shrubs and securing 1,518 hectares of lands for conservation. The refined Greening Strategy approved by Council in <u>May 2022</u>, provides direction to expand and review existing Strategy programs with 23 new actions to maximize ecological impacts across the Region. Through this refinement, the Region is creating more opportunities for residents, businesses, and partners to work together to make York Region a greener and resilient community.

4. Analysis

Greening Strategy delivered strong performance in all action areas in 2022

In 2022, Greening Strategy programs and implementation partners continued to adapt to challenges posed by the pandemic. With restrictions lifted, educational programming began to return to in-person delivery during the fall. This resulted in fewer program participants in 2022 with the expectation the target will be met in 2023. All York Regional Forest in-person events were fully booked within days of opening registration. Programming evolved to provide residents with options to meet their needs while aligning with public health measures. Greening Strategy achievements exceeded targets in several action areas, contributing to a greener York Region (Table 1). Appendix 1 presents 2022 Greening Strategy achievements.

Action Area	Goal	Target (Minimum)	2022 Achievement
Enhancement and Rehabilitation	Enhance and rehabilitate the natural environment on public and private lands	Plant 70,000 trees and shrubs	110,391 trees and shrubs planted
Environmental Land Protection and Preservation	Protect and enhance natural areas and create and strengthen connections and corridors	Increasing area (hectares) of environmental lands secured	13.7 hectares of environmental land secured
Community Stewardship and Education	Inspire stewardship and action through education and facilitating connections with nature	100 outreach events	123 outreach events
		10,000 residents participate in programs	8,621 program participants
Innovation and Knowledge	Seek and transfer knowledge and demonstrate leadership and innovation in the protection and promotion of the natural environment	Lead or present at 15 professional learning events	Led or presented at 29 professional learning events

Table 1Greening Strategy 2022 Achievements

With 110,391 trees and shrubs planted, York Region achieved the largest number of plantings in a single year since 2011

Greening Strategy initiatives delivered strong results in 2022, with 110,391 trees and shrubs planted. New trees and shrubs were planted in schoolyards, backyards, municipal parks, private forests, conservation areas, along streets, and in the York Regional Forest. Through Regionally-supported programs, planting efforts created an additional 59 hectares of woodland, primarily in the Regional Greenlands system. In addition to trees, over 6,000 pollinator-friendly plants and 900 pollinator seed mixes were planted or distributed to create habitat for butterflies, bees and other pollinators.

York Region and partners began a return to in-person educational programming with 102 in-person events

Inspiring residents to make a personal commitment to protect and preserve the natural environment is a critical action in creating a greener York Region. In 2022, after two years of virtual digital engagement and education, Greening Strategy programs began returning to inperson delivery. Through community tree planting, educational walks and pop-up events, 102 events were held to connect with residents. Monthly events in the York Regional Forest returned in September with over 260 participants at four York Regional Forest Walks and events.

In 2022, 21 virtual events provided additional opportunities for residents to engage with Greening Strategy programming. Due to the success of these alternatives, virtual options for residents and groups will continue to be offered alongside in-person events.

Team from York Region high school wins Ontario Envirothon Competition and participates in North American event

The Greening Strategy provides support for the Ontario Envirothon competition, where teams of high school students complete a series of outdoor challenges to learn more about the natural environment. For the first time ever, a team from York Region won the Ontario competition hosted by Forests Ontario. The "Saxophones" team from St. Elizabeth Catholic High School in the City of Vaughan took first place and went on to compete in the North American Envirothon.

With funding support from Infrastructure Canada, the Region continues to plant significant numbers of trees to mitigate impacts of climate change

In 2019, York Region was awarded \$10 million in funding through Infrastructure Canada's Disaster Mitigation and Adaptation Fund to implement a \$25 million natural infrastructure project over eight years. The project will result in over 400,000 trees and shrubs being planted across the Region, including establishing 100 hectares of new woodland by 2027.

In 2022, the Region planted 26,531 trees and shrubs in urban areas and 22,470 seedlings to establish new woodlands to support meeting the DMAF deliverables. The planting portion of

the project is 39% completed, with 81% of land secured (See Table 2). Staff anticipate meeting deliverables as planned by the March 2028 project completion date.

York Region's green infrastructure assets remove and store over 1,700 tonnes of carbon per year. This project will increase the Region's resilience to climate change through additional carbon removal and storage and mitigation of extreme heat and flood events.

Table 2

Disaster Mitigation	and Adaption Fund	Progress 2019- 2022
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Deliverable	Completed
186,000 urban trees planted	65,391 trees planted
12,500 street trees planted	6,907 planted and watered
203,500 seedlings planted	22,470 planted
Low impact development soil trenches constructed along 35km of regional roads	10 km of Regional roadway with low impact development soil trenches
10 assisted migration adaptation trees species trials	9 tree species trials planted
100 hectares of land secured for reforestation	81.5 hectares of land secured for reforestation

In 2021, Public Works was awarded \$225,000 in funding from the Federal Economic Development Agency Canada Community Revitalization Fund to install nine pollinator meadows along Regional rights-of-way. These meadows will support the population of butterflies, bees and other insects. This project will reduce the need to cut grass in the rights-of-way, reducing greenhouse gas emissions. The pollinator-friendly plants will also assist in the removal and storage of carbon from the environment.

Led by Transportation with input from Forestry, Toronto and Region Conservation Authority, Lake Simcoe Region Conservation Authority and the Chippewas of Georgina Island First Nation, one meadow was installed in 2022 in Richmond Hill, with the remaining eight planned for installation in 2023.

Partner collaboration key to managing impact of invasive species on York Region's trees and natural areas

Many invasive insects and plants continue to impact or pose a threat to the Region's urban landscapes and natural areas. In 2021, the Region observed an unprecedented outbreak of spongy moth (formerly known as LDD or gypsy moth) resulting in high levels of defoliation across much of the Region. In 2022, the spongy moth population collapsed due to several natural controls, including the nucleopolyhederosis virus. Little to no defoliation is expected across the Region in 2023. The Region continues to collaborate with local municipalities, Chippewas of Georgina Island First Nation, provincial and federal governments, and non-governmental organizations to manage invasive species, monitor emerging threats, while also providing education and resources to residents.

York Region Forest Management Plan actions support efforts to increase canopy and woodland cover

York Region Forest Management Plan, approved by Council in <u>November 2016</u>, was developed to provide a roadmap to increase canopy and woodland cover through the sustainable management of the Region's tree and forest resources. The plan supports the Region's Official Plan targets to increase canopy cover to 40% and woodland cover to 25% by 2051. In 2021, York Region measured canopy cover at 33.4% and woodland cover at 23.6%. Progress continues to be made towards these targets and the next five-year update report on canopy and woodland cover is planned for 2026. Plan goals are achieved through a series of short- (years 2017 - 2019), medium- (years 2020 - 2026) and long-term (years 2027 - 2031) actions.

Progress on the York Region Forest Management Plan's 34 medium-term actions continue, including:

- 15 actions completed
- Three actions in progress
- 16 actions planned for future years

Key actions advanced in 2022 from the York Region Forest Management Plan include:

- Use the Region's Tree Planting Prioritization tool to strategically plant trees across York Region
- Evaluate and report on trees and forest through the 2021-2025 Forest Studies Reports completed and have been shared with the Cities of Richmond Hill and Markham
- Review planting programs and identify new planting opportunities

The Region has also partnered with the Chippewas of Georgina Island to fund tree planting initiatives and received support from the First Nation in developing and delivering educational programs in the York Regional Forest.

York Region continues to collaborate with City of Markham and Parks Canada to implement Rouge National Urban Park Management Plan

As the largest urban park in North America, the Rouge National Urban Park protects and shares the park's remarkable natural, cultural and agricultural landscapes, while providing residents and visitors world-class outdoor recreation and interpretive experiences. The Region and City of Markham have built a strong working relationship with Parks Canada to ensure successful development and management of the park. The Region continues to work with the City of Markham and Parks Canada to advance a memorandum of understanding that establishes the principles for a continued collaborative relationship.

5. Financial

In 2022, \$2,115,000 was approved in the operating budget for the Greening Strategy, with \$1,309,000 to support programs and partnerships including large-scale reforestation, backyard tree planting, outdoor education, and land securement agreements. The remaining \$806,000 is held in the Greenlands Property Securement Reserve for future environmental land purchases (Table 3).

Through partnerships, the Greening Strategy leverages in-kind resources and external funding for each action area. In 2022, the Region and partners leveraged a total of \$2.3 million in additional funding towards Strategy projects and programming, including \$955,000 in funding from DMAF.

The Region will begin to offer new and revised programs as actions from the refined Greening Strategy are implemented, beginning in 2023.

Program	2022 Budget	2023 Budget
Environmental Land Purchases	\$806,000	\$911,000
Greening Strategy Implementation	1,309,000	1,508,000
Total Operating Budget	\$2,115,000	\$2,419,000

Table 3

Greening Strategy 2022/23 Operating Budget Overview

6. Local Impact

Through Greening Strategy programs, local municipalities and residents take action to protect and enhance the Region's natural environment. Local municipalities and non-government organizations have benefited directly from the Greening Strategy through on-the-ground actions or direct support for their programs. The development of new programs

through the 2022 Greening Strategy refinement will involve local municipal and stakeholder consultation to design programs that reflect the current needs of residents.

7. Conclusion

The Regional Greening Strategy has been a driving force for sustainability and the natural environment in York Region. In 2022, programming and partners continued to increase output and recover from challenges caused by the COVID-19 pandemic. With more than 110,000 trees and shrubs planted in 2022, significant gains continue to be made towards increasing tree canopy and woodland cover in York Region. This report is a demonstration of the Region's leadership and the value of the Greening Strategy as a proactive measure to support a healthy sustainable Region.

For more information on this report, please contact David Szeptycki, Director, Environmental Promotion and Protection, Public Works at 1-877-464-9675 ext.75723. Accessible formats or communication supports are available upon request.

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April 13, 2023 14501706

Appendix 1 - 2022 Greening Strategy Achievements

2022 GREENING STRATEGY ACHIEVEMENTS

York Region's Greening Strategy puts into action the Region's commitment to a healthier, more resilient natural environment

YORK REGION FORESTRY Healthy Trees, Healthy Communities



ENHANCEMENT AND REHABILITATION

Planting trees, shrubs and pollinator plants, restoring streams and wetlands, and establishing new forests, hedgerows and meadows ensure a sustainable environment for future generations

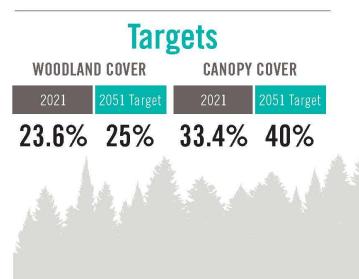


110,391 trees and shrubs were planted through more than **20 partnerships**:

- 43,146 Grow Your Legacy
 - 667 Backyard Trees
- 4,535 Ontario Streams Program
- 3,078 Green Action Partnership Fund
- 49,001 Disaster Mitigation and Adaptation Fund
- 9,964 Other Programs

Plantings occurred on both public and private land in a variety of habitats.





COMMUNITY STEWARDSHIP AND EDUCATION

Inspiring stewardship and action through education and facilitating connections with nature is one of our strongest tools.



Residents re-connected with nature and learned about the natural environment through a variety of events hosted by York Region and partners. These events were delivered through in-person and digital media.



Programming evolved to meet deliverables and provide residents with options to meet their needs while aligning with COVID-19 public health measures. Residents were able to learn about the York Regional Forest and connect with experts through digital platforms.

A return to in-person educational events began in 2022 as health measures allowed.



ENVIRONMENTAL LAND PROTECTION AND PRESERVATION

A healthy, extensive and connected natural heritage system is essential for biodiversity, and public green spaces are important amenities that provide recreation opportunities and support the physical and mental well-being of residents.

13.7 ADDITIONAL HECTARES SECURED

In 2022, the Oak Ridges Moraine Land Trust secured a property in the Township of King through a Land Securement Agreement with York Region.

Through agreements, partners work cooperatively with residents, municipalities and others to encourage environmental land protection and secure individual lands. Exchanged information, shared accomplishments, and continued innovation at **19 Regional Forums** and **10 technical presentations** throughout the Region.

INNOVATION AND KNOWLEDGE

York Region remains a leader in the protection and

policies, programs and use of innovative strategies.

promotion of the natural environment through its

\$2,274,000 LEVERAGED GREENING STRATEGY PROJECTS

In 2022, the Region and its partners leveraged a total of **\$2.3 million** in additional funding, including **\$955,000** in funding from Infrastructure Canada's Disaster Mitigation and Adaptation Fund.







Research partnerships support leadership in York Region.

In 2022, York Region partnered on research projects with the University of Toronto and the Greenbelt Foundation. These research projects are informing how greenspaces effect residents in both urban and rural settings.



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