



May 17, 2019

Ms. Kimberley Kitteringham City Clerk City of Markham 101 Town Centre Boulevard Markham, ON L3R 9W3

Dear Ms. Kitteringham:

Re: **2018 Greening Strategy Achievements**

On May 16, 2019 Regional Council adopted the following recommendation:

1. The Regional Clerk circulate this report to the Clerks of the local municipalities. 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.

The original staff report is enclosed for your information.

Please contact Laura McDowell, Director of Environmental Promotion and Protection at 1-877-464-9675 ext. 75077 if you have any questions with respect to this matter.

Sincerely,

Christopher Raynor

Regional Clerk

Attachments

The Regional Municipality of York

Committee of the Whole Environmental Services May 2, 2019

Report of the Commissioner of Environmental Services

2018 Greening Strategy Achievements

1. Recommendation

The Regional Clerk circulate this report to the Clerks of the local municipalities, 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 provides Council with an update on activities, partnerships and significant 2018 Greening Strategy environmental achievements.

Key Points:

- Since 2001 the Greening Strategy has delivered on the ground actions that contribute to the Regional Official Plan goal of a sustainable natural environment, including increasing woodland cover to 25% by 2031
- 2018 achievements include planting 101,122 trees and shrubs, securing 32.5 hectares of environmentally significant lands, and inspiring residents to take action through 289 Regional and partner events
- Strategy is delivered through successful partnerships with local municipalities, Conservation Authorities and non-government organizations, the Region's Greening Strategy leverages funding from multiple sources, including \$2.57 million in 2018
- The award winning Bill Fisch Forest Stewardship and Education Centre and the Green Infrastructure Asset Management Plan were recognised for their innovation and leadership in 2018

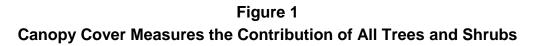
3. Background

Engaging residents and partners since 2001, Greening Strategy innovation inspires protection, restoration and enhancement of the natural environment

In response to public input the Greening Strategy was developed in 2001 to demonstrate on the ground action in support of the Region's goal of a sustainable natural environment. Through its four action areas the strategy supports healthy natural environments that foster healthy, sustainable communities for current and future generations. Success is achieved through a variety of programs that inspire action by engaging residents including; subsidized tree planting on public and private lands, promotion of stewardship activities, and securing strategic environmental lands. Innovative partnerships are the cornerstone of program delivery. The Strategy continues to be a key delivery mechanism for increasing tree canopy and woodland cover in the Region. Achievements are reported annually to celebrate successes and demonstrate continuous improvement.

Achievements contribute to increasing tree canopy and woodland cover toward targets adopted by Council

The York Region Forest Management Plan, approved by Council on <u>November 17, 2016</u>, confirmed the Regional Official Plan objective to increase woodland cover to 25% by 2031, and established a Regional tree canopy cover target of 35% by 2031. Canopy cover includes all woodlands, individual trees and small treed areas (Figure 1). Woodlands are heavily treed areas that are at least 0.2 hectares in size. Woodland and canopy cover were last reported to Council on <u>March 23, 2017</u> to be 23.2 per cent and 31 per cent respectively. The Management Plan guides decisions and activities related to the protection and management of forests on private and public land to the year 2031. The Greening Strategy actions compliment this plan and its achievements, including tree and shrub planting and resident engagement.





4. Analysis

2018 Greening Strategy achievements continue to demonstrate the Region's commitment to a sustainable natural environment

Greening Strategy achievements continue to exceed targets in several action areas, contributing to a greener York Region (Table 1). Through 2019 targets will be reviewed to ensure alignment with program delivery. The Region's investment in the Greening Strategy, including tree planting and protection of forests, provides multiple benefits to residents. Increased canopy and woodland cover also contributes to climate change mitigation by reducing energy needed to cool and heat buildings, slowing storm water run-off, and sequestering carbon. Scientific evidence has also demonstrated the link between human health and the presence of green space. As a key delivery mechanism, the Regional Greening Strategy supports the 2019-2023 Strategic Plan priority to build sustainable communities and protect the environment. Attachment 1 showcases 2018 Greening Strategy achievements.

Action Area	Goal	Target (minimum)	2018 Achievement	
Stewardship and public education	Educate residents about the value of green infrastructure and	100 outreach events	289 outreach events	
	provide opportunities to connect with nature and inspire action	Engage 50,000 residents	Over 50,000 residents engaged	
Enhancement and rehabilitation	Enhance and rehabilitate the natural environment on both public and private lands	Plant 70,000 trees and shrubs	101,122 trees and shrubs planted	
Environmental land protection and preservation	Protect core natural areas and restore linkages	Increasing area (hectares) of environmental lands secured	32.5 hectares of environmental land secured	
Leadership, innovation and knowledge	Share knowledge, demonstrate leadership and be innovative in the protection of the natural environment	Host four technical regional forums	13 forums hosted with agencies and local municipalities	
		Present at two science and technology forums	12 presentations at science and technology forums	

Table 1

Greening Strategy Action Areas, Goals, Annual Targets and Achievements

Delivery of Forest Management Plan actions focussing on a variety of activities targeting increasing tree canopy cover and woodland cover are on track

The York Region Forest Management Plan 2016, identified 34 short term actions to be completed by the end of 2019 with a focus on increasing tree canopy cover and woodland cover. Twenty one of these actions are being delivered through existing programs while the remaining 13 are being advanced through new initiatives. Of the 13 new initiatives, seven have been completed and the remaining six are on track for completion by the end of 2019. Attachment 2 summarizes the details and progress on the 34 short term actions.

A total of 101,122 trees and shrubs were planted on public and private lands creating an additional 44.4 hectares of woodland

Greening Strategy partnerships continued to deliver excellent results in 2018 with 101,122 trees and shrubs planted through a variety of initiatives (Figure 2). Through partnerships and funding grants the Region's investment of \$309,000 leveraged an additional \$621,000 towards planting. Partners are able to use the Region's contributions to leverage additional funds through programs such as the provincial 50 Million Tree Program delivered by Forests Ontario.

Planting efforts created 44.4 hectares of new woodlands, primarily located in the Regional Greenlands System. Sixty-five per cent of the trees were planted through our subsidized large scale planting program, Grow Your Legacy, delivered by Conservation Authorities. Collaboration among Regional departments resulted in 10,971 trees being planted on York Region properties (e.g. street trees and Roads Maintenance North Yard). Planting on Regional properties demonstrates our commitment to increasing tree canopy and woodland cover.

The Region remains committed to the protection of pollinators including Monarch butterflies, and offered incentives and opportunities for residents to plant milkweed through; seedling and seed package hand-outs, support for municipal native plant sales and promotion of pollinator garden kits.

Figure 2 2018 Tree and Shrub Planting Accomplishments



Successful partnerships protected 32.5 hectares of environmentally significant lands valued at \$2.1M last year

Over 1,367 hectares of environmental lands have been permanently protected through the Greening Strategy since 2001. Projects are brought forward through partnership agreements, direct negotiations with private landowners, and collaboration with Conservation Authorities and municipal partners. Land securement tools include stewardship agreements, donations, conservation easements and purchase. Property securement requires considerable time and effort to complete including building relationships with landowners, negotiating details and completing transactions.

In 2018 the Oak Ridges Moraine Land Trust secured a 32.5 hectare property in King Township through a \$2,075,000 purchase (Attachment 3) now managed as the Maple Cross Nature Reserve. The Region contributed \$741,615 towards the purchase and the remaining balance was provided through a generous private donation and the Federal Government's Natural Areas Conservation Program.

Residents were inspired to act through 289 environmental outreach and education events delivered by partners and the Region

Significant environmental gains can be made when residents are inspired to make a personal commitment to protect and preserve the natural environment. The Greening Strategy engages residents through education and outreach programs including interpretive forest walks, presence at local festivals/events, and a variety of environmental outreach activities delivered by partners. In 2018 over 50,000 residents were engaged through a variety of media and activities including 15,613 residents participating in 289 outreach events. More than half of these events were delivered by partners. Participation at events continues to grow indicating a strong interest from residents to learn more about the natural environment.

Seniors engaged through a pilot project funded through a Ontario Seniors Community Grant

A pilot program to engage seniors was delivered in 2018 with seven events and 121 participants. Through this partnership program seniors learned about nature, the York Regional Forest, accessible trails and also received valuable information about seniors programs across the Region. Participant feedback from the pilot was very positive with seniors enjoying the opportunities for physical activity and socializing with their peers. Based on the positive feedback received during the pilot, seniors programming will be offered as part of the Nature's Classroom program. Inclusion of new seniors programming supports implementation of the <u>York Region Seniors Strategy</u>.

The Region continues to be recognized as a leader in protecting the natural environment through innovative approaches to conservation

Innovative projects including the Bill Fisch Forest Stewardship and Education Centre and the Green Infrastructure Asset Management Plan were recognised for their innovation and leadership in 2018. The Forest Stewardship Centre was recognized as the first building in Canada to receive full Living Building Challenge certification. This global sustainability standard places the building amongst only 21 buildings worldwide to meet this criterion. As well, through its work on the Green Infrastructure Asset Management Plan the Region was recently awarded a Lieutenant Governor's Ontario Heritage Award for Excellence in Conservation. The plan recognizes the value of green infrastructure (e.g. street trees and York Regional Forest) and outlines a strategy to optimize the financial investment in our living assets.

The Region continues to demonstrate excellence in the management of natural areas through its work in the York Regional Forest. After two years of extensive stakeholder engagement through 2017 and 2018, Council approved It's in Our Nature: Management Plan for the York Regional Forest 2019 - 2038 in April 2019. The plan sets the direction for sustainable management of the Regional Forest until 2038, and seeks to balance the protection of ecological features with the provision of multiple benefits to residents.

5. Financial

Through partnerships, the Greening Strategy leverages significant resources and funds for projects in each action area. Funding contributions leveraged through partnerships vary with each project, and often achieve a minimum of a two dollar contribution for every dollar invested by the Region. In 2018, \$1.76 million was allocated to Greening Strategy delivery including a \$770,000 contribution to the Environmental Land Protection and Preservation reserve account for future land protection initiatives. The remaining \$990,000 supports projects and programs such as large scale reforestation, backyard tree planting, outdoor education and land protection partnership agreements. In addition the Region contributed \$741,615 from the land securement reserve to the Oak Ridges Moraine Land Trust property acquisition of the Maple Cross Nature Reserve in King Township. In 2018 the Region's

Greening Strategy project investment leveraged \$2.57 million in additional funding from external sources.

6. Local Impact

Local municipalities have a strong history of involvement in natural environmental projects and programs, and have benefited directly from the Greening Strategy. Local municipalities are consulted or involved in many of the programs and projects, including outreach, tree planting projects and environmental land protection and preservation initiatives. Local municipal staff are active on Greening Strategy working groups including the Land Securement Working Group, Invasive Species Working Group and Urban Forestry Forum. Collaborative forums provide an opportunity for communication, alignment and sharing best practices.

Greening Strategy programs provide local municipalities and residents with opportunities to enhance the natural environment. Greening initiatives support protection of Regional and local natural heritage systems, which in turn support sustainable communities.

7. Conclusion

Community engagement, incentives and partnerships are the foundation for Greening Strategy success. Significant gains continue to be made towards increasing tree canopy and woodland cover with 101,122 trees and shrubs planted in 2018. Through innovation and continuous improvement the Greening Strategy adapts to create efficiencies in programs and partnerships. This report demonstrates the Region's leadership and the value of the Greening Strategy as a proactive measure supporting a healthy sustainable Region.

For more information on this report, please contact Laura McDowell, Director of Environmental Promotion and Protection 1-877-464-9675 ext. 75077 or Ian Buchanan, Manager, Natural Heritage and Forestry 1-877-464-9675 ext. 75204. Accessible formats or communication supports are available upon request.

Recommended by:	Erin Mahoney, M. Eng. Commissioner of Environmental Services
Approved for Submission:	Bruce Macgregor Chief Administrative Officer
April 18, 2019 Attachments (3) #9110543	

2018 GREENING STRATEGY ACHIEVEMENTS

The Greening Strategy promotes on the ground action that supports healthy natural environments. It plants the seeds of inspiration for people of all ages to cultivate sustainable communities, now and for the future.

FORESTRY

1-877-464-9675 TTY 1-888-512-6228 accessyork@york.ca

york.ca/forestry





YORK REGION FORESTRY Healthy Trees, Healthy Communities Attachment 1



ENHANCEMENT AND REHABILITATION

Trees and shrubs produce oxygen, remove pollutants, reduce floods, filter water, improve health, provide shade and offer many more valuable ecosystem services.



101,122 trees were planted through more than **21 partnerships** and many programs including:

65,472 Grow Your Legacy program

10,971 York Regional property plantings

10,166 Green Action Partnership Fund

3,094 Adopt-A-Stream Crossing

11,419 Other programs

Plantings occurred on both public and private land. Enhancement is accomplished for all habitat types including woodlands, meadows, prairies, wetlands and streams.



Targets					
WOODLA	ND COVER	CANOPY COVER			
Current 2031 Target		Current	2031 Target		
23%	25%	31%	35%		

STEWARDSHIP AND EDUCATION

Our greatest gains are when residents are inspired to make a personal commitment to protect and preserve the natural environment.



Residents learned about the importance of the natural environment and the benefits of trees at a variety of events hosted by York Region and partners. These events provide opportunity to further educate residents about protection and enhancement of the natural environment.



SENIORS PILOT PROGRAMS Delivered with partners

Senior specific outdoor education programming was created to teach seniors about the benefits of connecting with nature and to highlight the York Regional Forest.

Programs were developed with funding support from Ontario Senior's Community Grant and partnerships with York Region Community and Health Services Department and the Oak Ridges Trail Association.



PROTECTION AND PRESERVATION

Protection of our Regional Greenland System is fundamental to achieving our canopy and woodland cover targets and an ecologically diverse natural environment.



In 2018, the Region contributed one-third of the funds to protect a property in the Township of King, linking natural areas in the Greenlands System.

Since 2001, this program has protected more than **1,367 hectares** of environmentally significant land.

Through partnership agreements, partners work cooperatively with residents, municipalities and others to encourage environmental land protection and secure individual lands.



Every York Region dollar spent is matched through partnerships.

Agreements with not-for-profit, grassroots, credible organizations, help to achieve a high level of performance and optimize the return on investment across all of the Greening Strategy Action Areas.

	PROGRAM, PARTNERSHIP AND ACHIEVEMENT HISTORY									
2001	2002	2005	2007	2010	2012	2013	2015	2016	2017	2018
 Greening Strategy Adopted Partnerships and Programs Begin 	• Forest Walks and Events	 Significant Woodland Criteria Forest Conservation Bylaw Update 	 Backyard Tree Planting 	 First York Regional Forest Accessible Trail Emerald Ash Borer (EAB) Management Plan 	 Envirothon Education Competition Greening Strategy Refinement 	• One Millionth Tree Planted	• Bill Fisch Forest Stewardship and Education Centre Opens	York Region Forest Management Plan	 State of the Forest Report Monarch Friendly Region 	 Bill Fisch Forest Stewardship and Education Centre receives full Living Building Challenge Certification

LEADERSHIP AND INNOVATION

To support a diverse and healthy ecosystem, York Region shares knowledge, demonstrates leadership and promotes innovation with partners and local municipalities.

Exchanged information, shared accomplishments and continued innovation at **13 Regional forums** and **12 technical presentations** throughout the Region.



BILL FISCH FOREST STEWARDSHIP AND EDUCATION CENTRE LIVING BUILDING CHALLENGE CERTIFIED

In early 2018, the Bill Fisch Forest Stewardship and Education Centre became the **first building in Canada** to receive Living Building Challenge Certification.

The **Green Infrastructure Asset Management Plan** won the Lieutenant Governor Ontario Heritage Award for Excellence in Conservation and the Association of Consulting Engineers - Engineering Excellence Award.





YORK REGION FOREST MANAGEMENT PLAN

Short Term Actions (2017 to 2019) 2018 STATUS

<image/>	34
GOAL 1 Canopy Cover and Woodland Cover	STATUS
Develop a prioritized planting plan by analyzing current planting opportunities.	
Continue to assess tree planting opportunities on Regional-owned properties.	$\langle \rangle$
Prepare a summary report of urban forest studies, including results of integrated monitoring.	\checkmark
Continue to optimize existing tree planting partnerships (e.g. school boards).	\checkmark
Implement 'Grow Your Legacy' large-scale private land tree planting campaign.	
Continue to actively support others in the development of urban Forest Management Plans.	Ì
Continue to collaborate with York Region departments, local municipalities, agencies and partners to share information and exchange ideas.	Ì
Monitor to ensure that the York Region Forest Management Plan is followed, reports on results are prepared and activities achieve desired results.	Ì
Complete the update of York Region's Street Tree and Forest Preservation and Compensation Guidelines.	\checkmark
Update York Region's Street Tree Planting Design Guidelines and share with local municipalities.	
Assess the alignment of the Forest Management Plan with Provincial Plans and York Region's Official Plan.	
GOAL 2 Climate Change and Sustainability	STATUS
Continue to undertake assisted migration trial plantings to adapt to climate change.	Ś
Continue to collaborate with organizations including the Invasive Species Council, Canadian Food Inspection Agency and the Canadian Forest Service to quickly detect and respond to threats.	Ø
Continue to collaborate with partners to explore science-based biological control opportunities.	\bigotimes
Look into innovative low-impact development practices that emphasize conservation and use of green infrastructure to manage storm water quantity and quality.	



 \checkmark

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STATUS

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Document use of agricultural easements and shared benefits, practices in collaboration with the Ontario Farmland Trust.

Continue to coordinate the Emerald Ash Borer Technical Working Group.

Continue to manage the York Regional Forest to meet the Forest Stewardship Council certification requirements.

NEW! Prepare York Regional Forest 20 Year Forest Management Plan for 2019-2038 period.

Share best practices on urban tree planting and maintenance through forums and events.

Strengthen relationships among the Region, local municipalities, Ontario Woodlot Association, Forests Ontario and others to encourage good forestry practices on private land.

GOAL 5 | Governance, Innovation, Research and Development

Continue to review emerging science-based arboriculture practices and integrate into tree planting and maintenance specifications.	Ì
Continue to review science-based silvicultural practices to inform management of the York Regional Forest and implementation of the Forest Conservation Bylaw.	\bigotimes

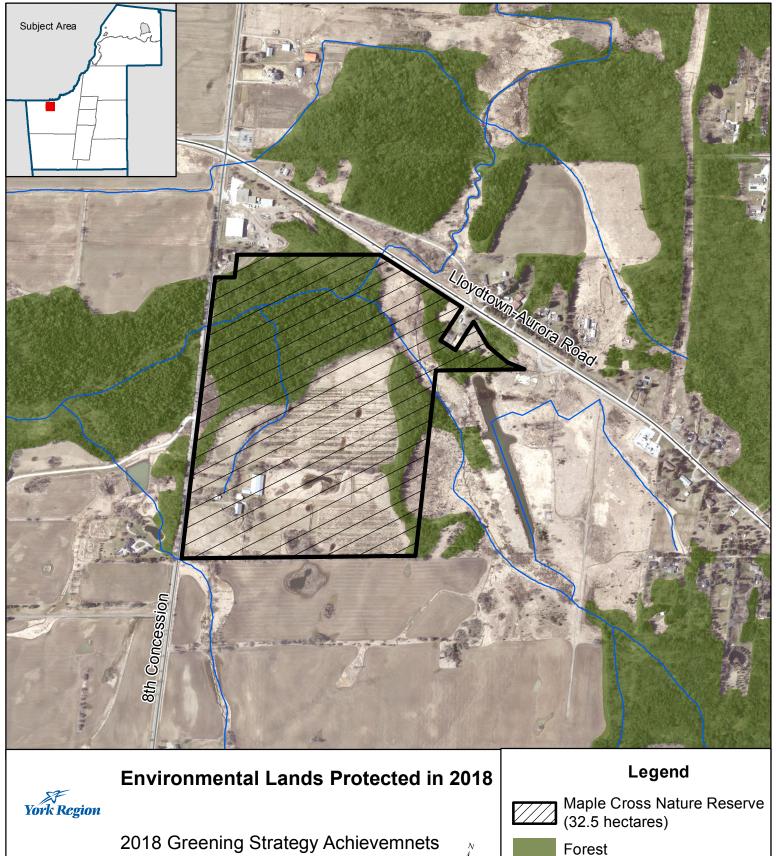
Complete a green infrastructure asset management plan for Regional assets, including street trees.

Promote green infrastructure asset management as a best practice to the province, municipalities	/
and other organizations.	V

Continue to provide input to provincial and federal legislation through coordinated reviews within and between departments.

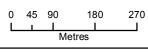


Attachment 3





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Municipal Bounadary

Regional Boundary

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