

Clause 7 in Report No. 8 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on May 25, 2017.

7

2016 Greening Strategy Achievements and
Partnership Agreements

Committee of the Whole recommends:

1. Receipt of the presentation by Ian Buchanan, Manager of Natural Heritage and Forestry Services, Environmental Services.
2. Adoption of the following recommendations contained in the report dated April 20, 2017 from the Commissioner of Environmental Services:
 1. Council authorize renewal of three agreements with respect to the Regional Greening Strategy for a term of two years with:
 - a) Ontario Streams for a maximum annual contribution of \$40,000
 - b) Evergreen Foundation and York Region District School Board for a maximum annual contribution of \$10,000 to the Evergreen Foundation
 - c) Evergreen Foundation and York Catholic District School Board for a maximum annual contribution of \$10,000 to the Evergreen Foundation.
 2. Council authorize the Commissioner of Environmental Services to approve further renewals of the three agreements, provided that sufficient funds are available in the annual budget and that the total of any renewal terms does not exceed 6 years.
 3. Council authorize the Commissioner of Environmental Services to execute the agreements and any renewal agreements on behalf of the Region.
 4. The Regional Clerk forward a copy of this report to the local municipalities in York Region, Environment and Climate Change Canada, Natural Resources Canada, the Ontario Ministry of Natural Resources and Forestry, and the Ontario Ministry of the Environment and Climate Change.

Report dated April 20, 2017 from the Commissioner of Environmental Services now follows:

1. Recommendations

It is recommended that:

1. Council authorize renewal of three agreements with respect to the Regional Greening Strategy for a term of two years with:
 - a. Ontario Streams for a maximum annual contribution of \$40,000
 - b. Evergreen Foundation and York Region District School Board for a maximum annual contribution of \$10,000 to the Evergreen Foundation
 - c. Evergreen Foundation and York Catholic District School Board for a maximum annual contribution of \$10,000 to the Evergreen Foundation.
2. Council authorize the Commissioner of Environmental Services to approve further renewals of the three agreements, provided that sufficient funds are available in the annual budget and that the total of any renewal terms does not exceed 6 years.
3. Council authorize the Commissioner of Environmental Services to execute the agreements and any renewal agreements on behalf of the Region.
4. The Regional Clerk forward a copy of this report to the local municipalities in York Region, Environment and Climate Change Canada, Natural Resources Canada, the Ontario Ministry of Natural Resources and Forestry, and the Ontario Ministry of the Environment and Climate Change.

2. Purpose

This report provides Council with an update on activities, partnerships and significant 2016 Greening Strategy achievements. This report also seeks Council authorization to transition successful Greening Strategy pilot projects into agreements with Ontario Streams, Evergreen Foundation and York Region District School Board, as well as Evergreen Foundation and York Catholic District School Board. Each agreement is proposed for an aggregate term of greater than five years and therefore requires Council approval in accordance with subsection 16.1(a) of the Purchasing Bylaw (No. 2014-53).

3. Background and Previous Council Direction

Since 2001, Greening Strategy innovative partnerships have protected, restored and enhanced the natural environment

Since adoption of the Greening Strategy in 2001, achievements are reported to Council annually. Focused implementation delivers hands-on action consistent with the environmental policies in the Regional Official Plan. Greening projects and other Forestry programs are aligned to protect, restore and enhance the natural environment. Investment in green infrastructure, including tree planting and forest restoration, has multiple benefits ranging from climate change mitigation to public health improvements.

Results are achieved through strategic partnerships with non-government organizations such as the Evergreen Foundation and Ontario Streams. For more than 25 years, Evergreen has collaborated to transform public spaces (e.g. schoolyards) into thriving community spaces with environmental, social and community benefits. Ontario Streams has worked closely with landowners and school groups to restore streams and deliver education and stewardship initiatives since 1995. Partnerships with these organizations will leverage resources to restore and protect the natural environment.

Greening Strategy achievements help to increase both canopy cover and woodland cover across the Region

Woodland cover was last reported to Council on [March 23, 2017](#) to be 23.2 per cent or 41,244 hectares of forest within York Region. This is an increase of 725 hectares from the previous assessment, which was based on 2012 data. Greening Strategy tree planting programs contribute to this success. Tree planting efforts will also be counted towards the Region's canopy cover target of 35 per cent by 2031, recently adopted by Council ([November 17, 2016](#)).

York Region is now recognized as Canada's first monarch butterfly friendly Region

Correspondence received (received by Council on [May 19, 2016](#)) from the City of Markham announced their leadership in becoming Canada's first monarch butterfly friendly city. A memo from Chair Emmerson to Council (June 9, 2016) noted that the correspondence was referred to staff with direction to review and advance the opportunity to become a monarch friendly Region.

Staff from a cross section of Regional Departments (Environmental Services, Transportation Services, Community and Health Services - Public Health, and Corporate Services - Property Services) met to consider this opportunity. Staff reviewed potential conflicts (e.g. road or property maintenance, service

standards, public concerns) and discussed opportunities. No conflicts were identified and based on the cross department review staff proceeded with registration of the Region as Monarch Friendly.

The Region is now registered as being Monarch Friendly through the United States National Wildlife Federation (NWF) program. As a participant in this initiative, the Region is listed on the NWF website, and staff now have access to additional on-line resources including activity kits and educational materials, which support our outreach to residents.

Many Greening Strategy programs and projects, and other Regional initiatives such as Water for Tomorrow, support pollinator habitat. Being identified as Monarch Friendly is compatible with current programs and activities. In addition, there are opportunities to fine tune programs to further align operational activities, best practices and Greening projects to support this initiative. As the program develops staff will monitor and evaluate success as well as report back if there are future business impacts.

4. Analysis and Implications

In 2016 Greening Strategy continues to demonstrate success and exceed annual targets demonstrating exceptional performance

With all targets surpassed in 2016, the Regional Greening Strategy continues to be a key delivery mechanism supporting the 2015-2019 Strategic Plan objective to preserve green spaces. Tremendous accomplishments in the areas of tree planting and education and outreach were realized. Action areas of the Strategy, annual targets and achievements are summarized in Table 1.

**Table 1
Greening Strategy Action Areas, Goals, Annual Targets and Achievements**

Action Area and Goal	Target (minimum)	2016 Achievement	Complete
Stewardship and education	100 outreach events	221 outreach events	✓
Goal: Environmental education and landowner outreach	Reach 50,000 residents ¹	Over 50,000 residents reached ¹	✓
Enhancement and rehabilitation	Plant 70,000 trees and shrubs	93,188 trees and shrubs planted	✓
Goal: Tree, shrub, wetland and prairie planting			

2016 Greening Strategy Achievements and Partnership Agreements

Environmental land protection and preservation Goal: Securement of key conservation lands	Protect a five year rolling average of 65 hectares of land	323 hectares protected in the last 4 years (41 in 2016), which meets the 65 hectares rolling average target over the last four years	✓
Leadership, innovation and knowledge Goal: Facilitate research, collaboration, science and technology transfer	Host 4 regional forums Present at 2 science/ technology forums	14 forums hosted 7 presentations at science and technology forums	✓ ✓

¹ Includes outreach and contacts through media (social, print, television, etc.)

Trees are an investment in green infrastructure which provide community benefits including public health, and contribute to climate change mitigation

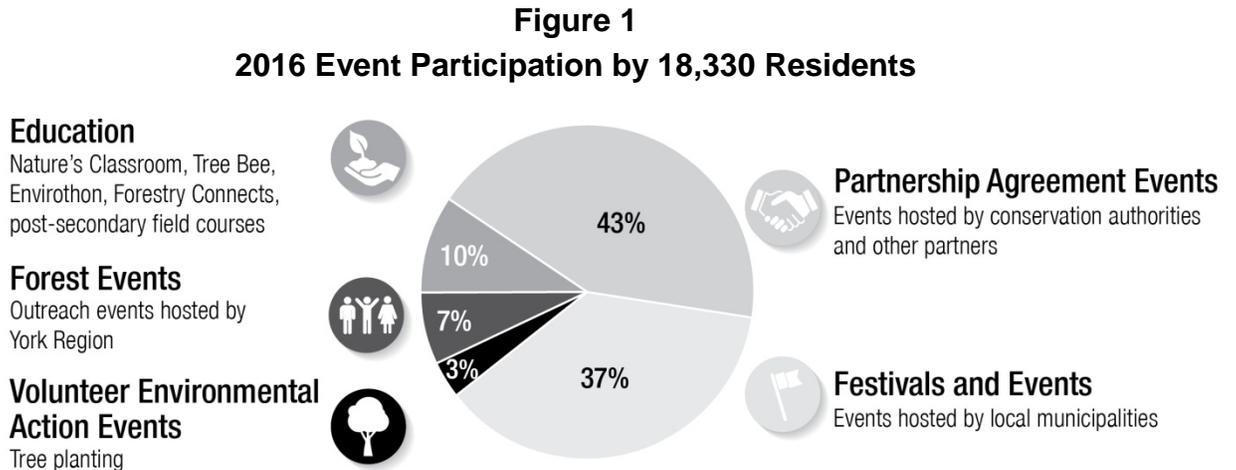
Council's investment in the Greening Strategy, including tree planting and the protection of forests, contributes multiple benefits for residents. Increasing scientific evidence demonstrates the link between human health and the presence of green infrastructure, including trees and shrubs. Increased woodland and tree cover also contributes to climate change mitigation by reducing energy needed to cool and heat buildings, slowing storm water run-off, and sequestering carbon.

Greening Strategy programs are designed to increase awareness of the benefits of green infrastructure, inspire action, and provide opportunities that support community action. Attachment 1 showcases some of the 2016 Greening Strategy achievements including the amount of funds leveraged across all action areas.

Education and outreach through 221 events engaged over 18,000 residents increasing environmental awareness

Education and outreach programs included interpretive forest walks and public events, presence at local festivals, and a variety of outreach and engagement activities delivered through partnerships. More than 18,330 residents participated in 221 environmental outreach and education events. Participation in almost all program areas continues to be at or near the maximum capacity. Figure 1

demonstrates the nature of the activities, which contribute to this accomplishment and participant distribution.



Note: Event participation totals are in addition to the over 50,000 residents reached through media.

Pilot projects making York Region school grounds greener in collaboration with Evergreen Foundation and both York Region School Boards

In 2015, two school ground greening pilot projects with the Evergreen Foundation were initiated in response to public feedback through the 2012 Greening Strategy refinement. Both York Region District School Board and York Catholic District School Board participated in these pilot projects. Accomplishments include completion of a guide on school ground greening for both Boards, engaging students to plant over 345 trees, and designing outdoor learning spaces in over 53 schools across nine municipalities.

Since 2001, Evergreen Foundation has a demonstrated track record of partnering with school boards across Canada to incorporate green learning spaces on school properties. The school ground greening program led by the Evergreen Foundation is a unique program designed to provide teachers, parents and school board staff with a resource person (the Associate) to facilitate planting projects on school grounds. The Associate drives projects that focus on the naturalization of school grounds with students planting trees and shrubs. Specific deliverables per agreement include planting a minimum of 45 trees, assisting at least 10 schools, training school board maintenance staff on tree care, green space design and more.

School ground greening partnerships deliver results and are suitable for multiyear agreements

Based on the positive results of the pilot projects, it is recommended that the Region enter into agreements with the Evergreen Foundation and each of the school boards. The proposed term of each agreement is two years, with a commitment of \$10,000 to the Evergreen Foundation per year for each of the two school board agreements, for a total annual contribution of \$20,000. Each school board is committed to matching the Region's contribution of \$10,000 per year.

Through partnerships 93,188 trees and shrubs were planted, contributing to 57 hectares of new forest

Last year was an exceptional year with 93,188 trees and shrubs planted through a variety of Greening Strategy initiatives (Figure 2). Through collaboration and funding grants an additional \$588,956 (up from \$306,065 in 2015) was leveraged from partners towards these initiatives. This more than matches the Region's contribution of \$205,000. Up significantly from 39 hectares in 2015, planting efforts created 57 hectares of new forest, primarily located in the Regional Greenlands System. This increase contributes towards our woodland cover target and can be attributed to program adjustments promoting large scale planting programs and encouraging priority planting on public land.

Figure 2
2016 Tree Planting Achievements



Stream bank restoration pilot project with Ontario Streams was successful and project is recommended for multiyear agreement

In 2016, the Region initiated a pilot project with the non-government organization Ontario Streams to run the Region's Adopt-A-Stream Crossing program, which contributes to wetland and stream rehabilitation projects throughout York Region. Delivery included 4,612 trees and shrubs planted on 32 sites along rivers and streams in seven municipalities involving 781 residents and leveraging \$72,000 in funding.

Ontario Streams has been implementing stream restoration projects in Ontario since 1995, and was involved with the development of the Region's initial Adopt-A-Stream Crossing program in 2001. They offer unique educational programs to help residents take action to protect and rehabilitate wetlands and streams on both public and private lands. Based on demonstrated performance it is recommended that the Region enter into an agreement with Ontario Streams to deliver tree and shrub planting associated with aquatic habitat restoration. The proposed term of the agreement is two years with a maximum annual commitment of \$40,000.

\$150,000 contribution by the Region protected 41 hectares of environmental lands on three sites within the Regional Greenlands System

The purpose of the Environmental Land Protection and Preservation program is to permanently protect natural landscapes and features through ownership or conservation easement. This is done through partnership agreements, direct contact with private land owners, and support towards conservation and municipal partner projects.

In 2016, three sites including lands within King Township, Town of Whitchurch-Stouffville and the City of Vaughan (Attachment 2), totalling 41 hectares of land (\$2.2 million appraised value) were protected through donation and acquisition projects with our partners (Table 2).

Strategic partnerships with local municipalities, Conservation Authorities, Nature Conservancy of Canada (NCC), and Oak Ridges Moraine Land Trust (ORMLT) continue to leverage resources and deliver results. The following describes characteristics of each property:

- Olamor property is a 27 hectare site located in the Happy Valley Forest. The land is designated as an Area Natural and Scientific Interest (ANSI) within the natural core of the Oak Ridges Moraine in King Township, and was acquired by the Nature Conservancy of Canada for its ecological significance.

- Five hectares of the land owned by PowerStream were conveyed to Toronto and Region Conservation Authority (TRCA) involving the Region's support through negotiations. Located within the Humber River watershed, the property contains a portion of an Environmentally Sensitive Area (ESA) with wetland and woodland features, and provides opportunities to increase canopy cover.
- Through a private donation, protection of a nine hectare parcel of land with a conservation easement was facilitated by the Oak Ridges Moraine Land Trust. Located in Whitchurch-Stouffville and adjacent to the Robinson Tract of the York Regional Forest, these lands are within the East Holland River watershed, contain forested areas and are in the vicinity of multiple Provincially Significant Wetlands.
-

Table 2
Properties Protected in 2016

Property	Municipality	Size (ha)	Partner and Project Cost**	York Region Contribution	Property Value
Powerstream	Vaughan	5	\$0 (TRCA)	\$0	N/A
Olamor	King	27	\$2,142,000 (NCC)	\$120,000*	\$1,742,534
Private donation	Whitchurch-Stouffville	9	\$25,000 (ORMLT & TRCA)	\$50,000*	\$1,725,000
Total		41	\$2,167,000	\$170,000	\$3,467,534

*Region has agreements with the NCC and ORMLT with annual contributions of \$120,000 and \$50,000 respectively in accordance with a Council approved three year partnership agreements (2016 to 2019).

**Project cost can include property purchase, legal, survey and NCC stewardship.

Bill Fisch Forest Stewardship and Education Centre achieved LEED Platinum certification and received two awards

In December 2016, the Bill Fisch Forest Stewardship and Education Centre in the York Regional Forest achieved Leadership in Energy and Environmental Design (LEED) Platinum certification, the highest designation by the Canada Green Building Council. Earlier in the year the building was awarded first place for project of the year from both the Professional Engineers of Ontario - York Chapter and Ontario Public Works Association. These awards recognize outstanding projects of a technical nature contributing to both engineering and

enhancing their surrounding communities. The building is currently being assessed under the Living Building Challenge for partial certification, and will seek full certification in 2018.

5. Financial Considerations

\$1.7 million invested to deliver Greening Strategy actions in 2016

Through partnerships, the Greening Strategy leverages significant resources and funds for projects in each program area. For example, lands protected by land ownership or conservation easement through Environmental Land Protection and Preservation programming targets a minimum of 2:1 of leveraged dollars to the Regions contributions. Funding contributions leveraged through partnerships vary with each project, and often exceed the 2:1 ratio. Greening Strategy programs are reviewed annually to ensure alignment with Regional objectives. In 2016, \$1.7 million was allocated to the Greening Strategy. \$950,000 was held in the Environmental Land Protection and Preservation reserve account for future land protection initiatives, and \$750,000 supported projects and programs such as Back Yard Tree Planting, outdoor education, land protection partnership agreements and large scale tree planting.

6. Local Municipal Impact

Local municipalities are important partners for Greening Strategy implementation

Local municipalities are consulted or involved in many of the programs and projects, including Urban Forest Studies, local municipal tree planting projects and environmental land protection and preservation initiatives. Local municipal staff are active on many Greening Strategy working groups including Land Securement Working Group, Invasive Species Working Group and Urban Forest Forum. Collaborative forums provide an opportunity for communication, engagement and alignment.

Greening Strategy programs provide local municipalities and residents with opportunities to enhance the natural environment. Greening initiatives support the protection of Regional and local natural heritage systems, which in turn supports sustainable communities. All nine local municipalities have a strong history of involvement in environmental projects and programs, and have benefited directly from the Greening Strategy.

7. Conclusion

Greening Strategy programs continue to be an effective mechanism to support the Region's environmental policies and combat climate change

For more than a decade, the Region has been recognized for its innovative leadership implementing the Greening Strategy. Progress is demonstrated through increased participation and delivery in all program areas. Residents are provided with opportunities to engage in environmental education and action. Achievements contribute to the health and well-being of the Region's residents, help mitigate the impacts of climate change and represent a sound investment in green infrastructure. Programs with tangible results continue to help realize the Region's environmental policies and objectives as articulated in the 2010 Regional Official Plan, 2015 to 2019 Strategic Plan and Vision 2051.

Partnership agreements are an effective tool for program delivery, which demonstrates good government

Delivery of the Greening Strategy, through agreements, incentives, community engagement and financial leveraging, is consistent with economic vitality and good government. More specifically, new innovative agreements with Evergreen and the two school boards, and Ontario Streams present a significant opportunity to further the environmental objectives of the Regional Official Plan and the Greening Strategy. The Greening Strategy demonstrates the Region's continued commitment to a resilient natural environment that fosters healthy, sustainable communities for current and future generations.

For more information on this report, please contact Laura McDowell, Director of Environmental Promotion and Protection at 1-877-464-9675 ext. 75077 or Ian Buchanan, Manager of Natural Heritage and Forestry at ext. 75204.

The Senior Management Group has reviewed this report.

April 20, 2017

Attachments (2)

#7587149

Accessible formats or communication supports are available upon request



2016 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.

THE REGIONAL MUNICIPALITY OF YORK
Environmental Services Department
Access York
1-877-464-9675
TTY 1-888-512-6228
accessyork@york.ca

york.ca/forestry



YORK REGION FORESTRY
Healthy Trees, Healthy Communities



ENHANCEMENT AND REHABILITATION

Focusing on increasing forest cover by offering incentives, subsidies and partnerships for public and private land tree planting.

STEWARDSHIP AND EDUCATION

Offering unique programs and events to provide opportunities for residents to connect with nature and be inspired to act.

PROTECTION AND PRESERVATION

Continuing to work collaboratively to protect the Regional Greenlands System and key linkages.

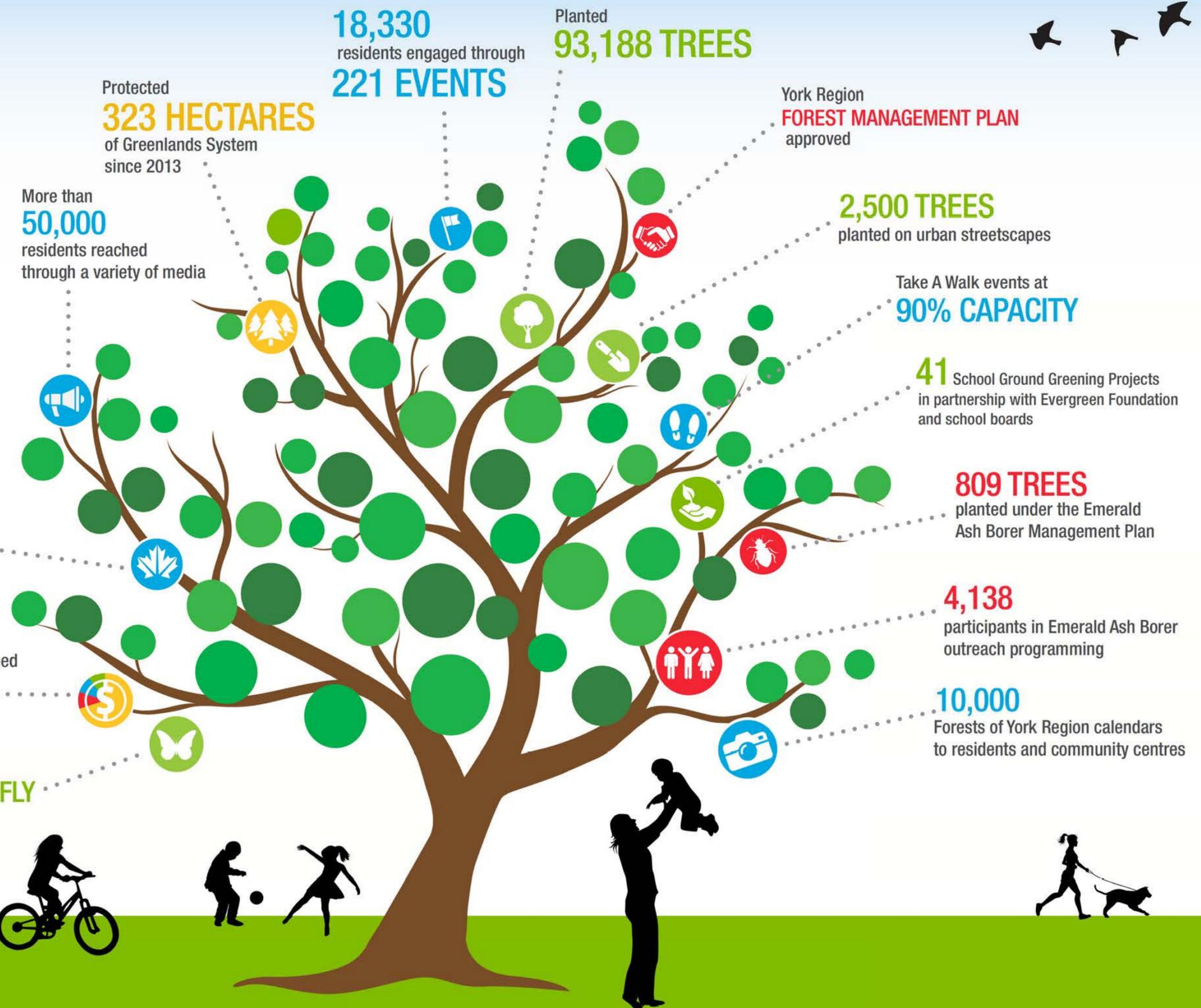
LEADERSHIP AND INNOVATION

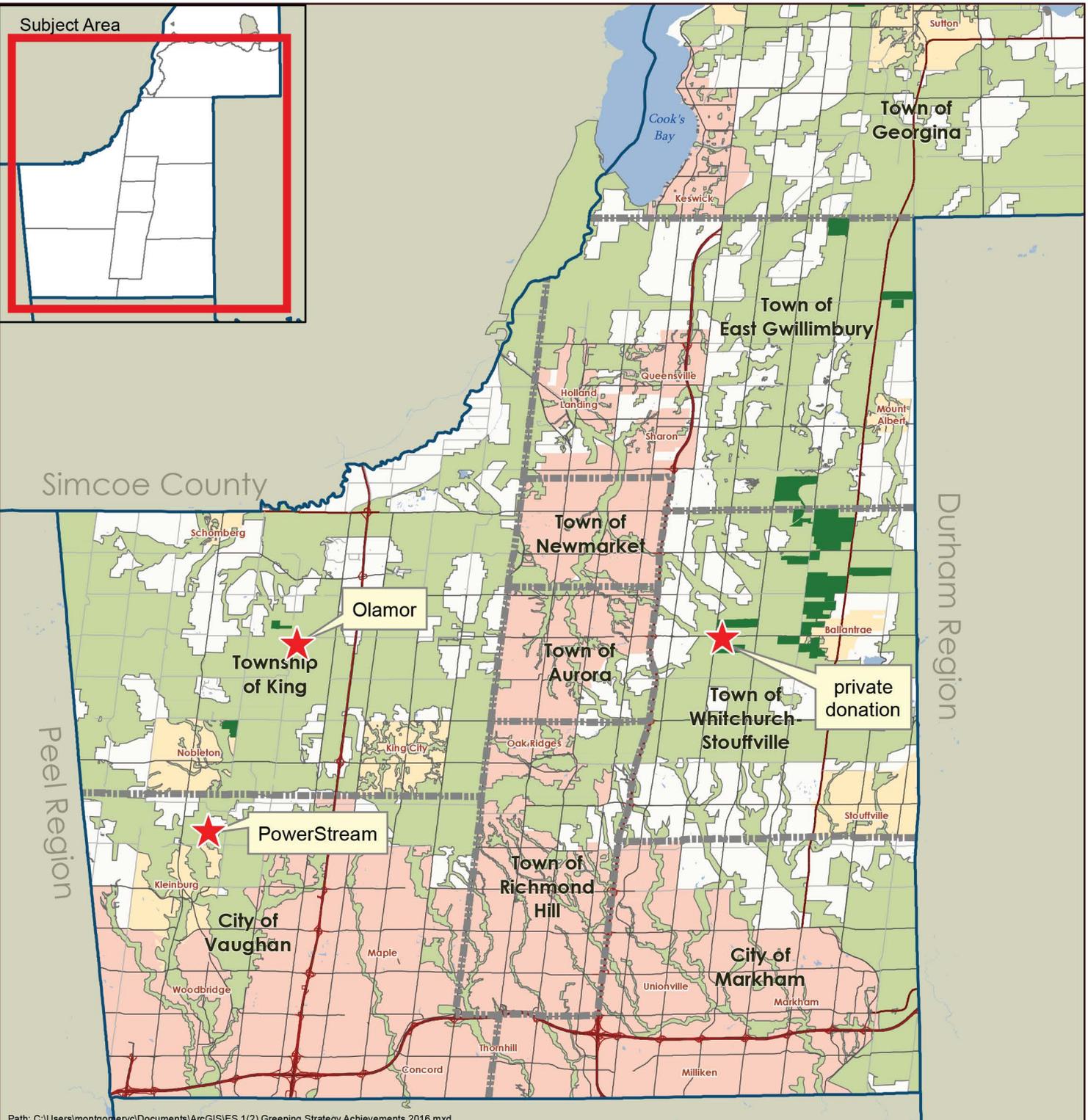
Demonstrating leadership through innovative opportunities to share knowledge and seek new technologies.

Bill Fisch Forest Stewardship and Education Centre received **LEED PLATINUM CERTIFICATION**

Partnerships across all action areas leveraged **\$2.8M**

Officially a **MONARCH BUTTERFLY** friendly Region





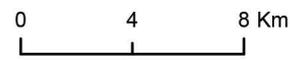
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Environmental Lands Protected in 2016

2016 Greening Strategy Achievements May 11, 2017

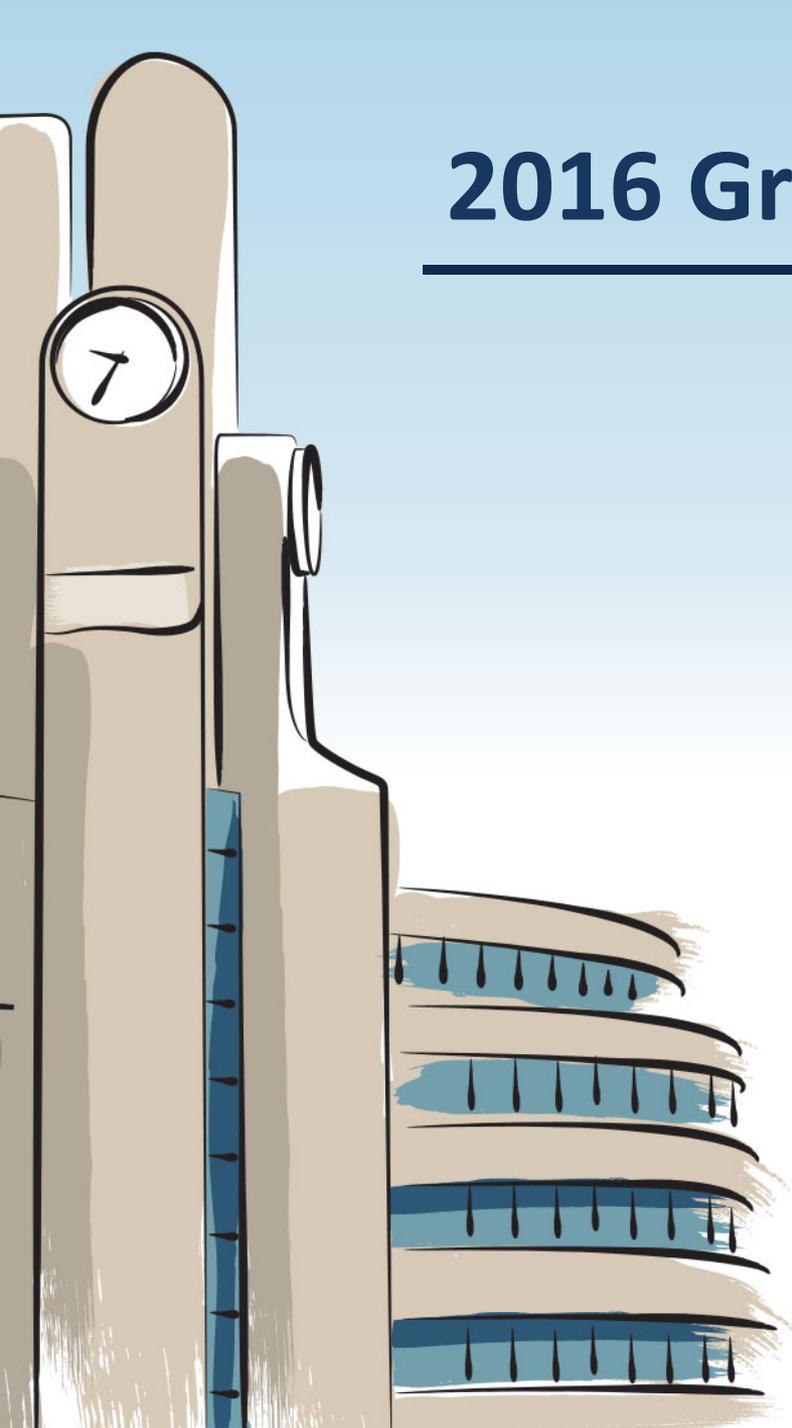


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 Environmental Services Department
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Legend

- Urban Area
- Greenlands System
- York Regional Forest
- Lands Protected



2016 Greening Achievements

Presentation to
Committee of the Whole
May 11, 2017

Ian Buchanan
Manager, Natural Heritage and Forestry
Environmental Promotion & Protection
Environmental Services



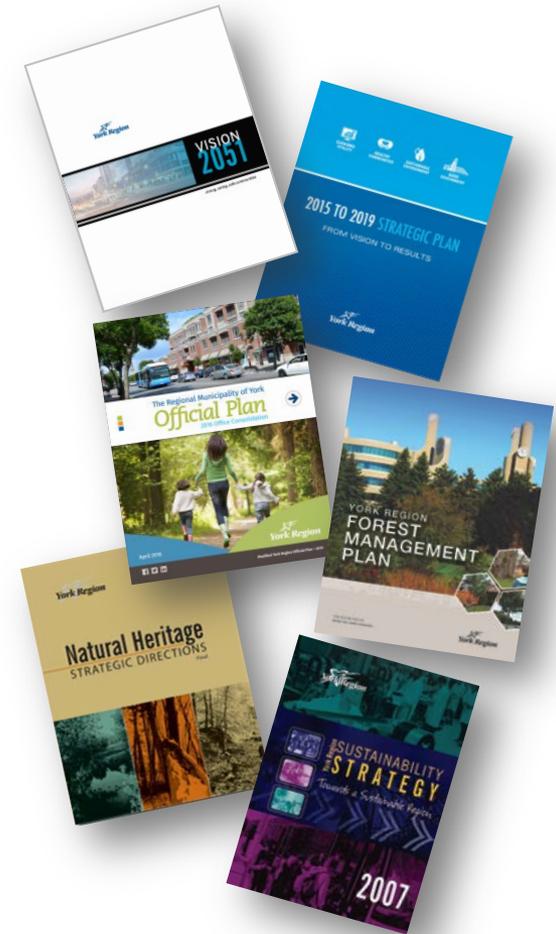
Presentation Outline

- Context
- Benefits of *Green Infrastructure*
- 2016 Greening Strategy achievements
- New Partnership Agreements
 - Ontario Streams
 - Evergreen Foundation and School Boards
- Working with our municipal partners



Greening Strategy - context

- Adopted in 2001 as a response to a need for more environmental action
- 4 Action Areas
 - Stewardship and education
 - Enhancement and rehabilitation
 - Environmental land protection
 - Leadership, innovation and knowledge
- Links to: York Region Official Plan, Vision 2051, 2015-2019 Strategic Plan, York Region Forest Management Plan



Investment in green infrastructure pays dividends in other areas and advances multiple Council goals

Stewardship and Education

- Festivals, hikes, community planting events, student programs, and more
- 18,000 residents engaged through 221 outreach events
- Monthly forest hikes attract 1,292 residents
- Special environmental events included:
 - National Forest Week
 - Participation in Earth Week, Children's Water Festival, International Envirothon

Engaged and educated residents are inspired to action



Monarch Butterfly Friendly Region

- Registered with the National Wildlife Federation as a monarch butterfly Friendly Region
- Committed to:
 - Encourage residents to create monarch butterfly habitat
 - Support a native plant sale
 - Convert abandoned lots to monarch habitat



Healthy Yards
PROGRAM

**CREATE A BEAUTIFUL GARDEN
AT A LOW COST!**

Pre-order native plant kits, backyard composters and/or rain barrels between April 4 and May 12 (while quantities last)!

Visit the Richmond Hill website to find out how to order.

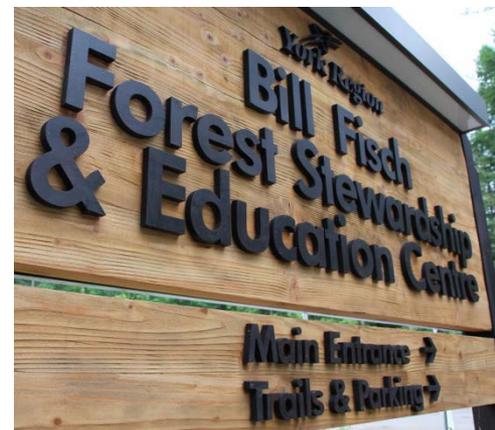
RichmondHill.ca/HealthyYards



Bill Fisch Forest Stewardship and Education Centre

- LEED Platinum certification
- Professional Engineers of Ontario and Ontario Public Works Association - Project of the Year
- Over 3,000 visitors in 2016
- Programming - outdoor education, forest events, facility tours for international visitors and post secondary schools, corporate meetings and team building

**Learning about nature is no substitute
for learning in nature**



Enhancement and Rehabilitation

OUR TARGET 70,000 → **93,188 TREES PLANTED IN 2016**

4,612 Adopt-A-Stream Crossing Program	4,675 Seedlings distributed	5,254 York Regional Forest	14,380 Large-scale private land reforestations	49,689 On public land	8,531 Partner community planting events	1,531 York Region outreach and education events hosted	516 Backyard LEAF	4,000 York Region Property Naturalization
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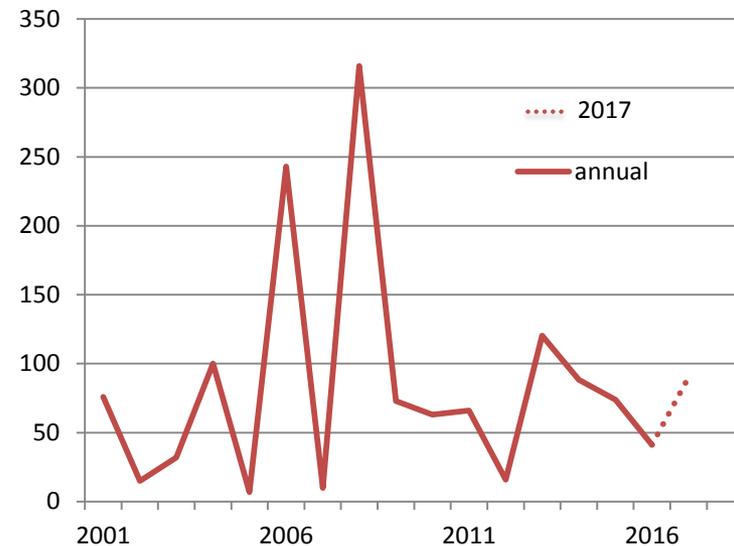
Plantings occur on public and private land in all nine municipalities.

Environmental Land Protection and Preservation

- Nature Conservancy of Canada partnership protects 26.8 ha through acquisition, King Township
- Conveyance of 5 ha from PowerStream to TRCA, City of Vaughan
- Oak Ridges Moraine Land Trust 9 ha in Town of Whitchurch-Stouffville
- Protection trending positive for 2017

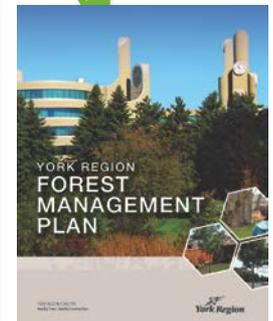
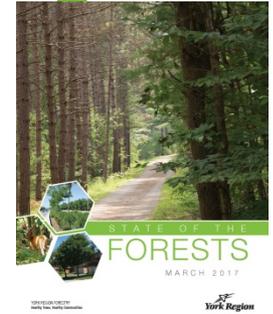
Year	Hectares protected
2013	120
2014	88
2015	74
2016	41
TOTAL	323
Annual Average	81
Target	65

1,312 ha of land protected since 2001
(range 7 – 316 ha per year)



Leadership, Innovation & Knowledge

- Urban Forest Studies completed with all local municipalities
- York Region Forest Management Plan
- Woodland Cover assessment
- Municipal forums to exchange information e.g. invasive species management, municipal Environmental Advisory Committees



New Partnerships Achieve Results

Ontario Streams

- Wetland & stream work since 1995
- 2016 pilot: 4,612 trees, 32 sites (7 municipalities) \$72,000 leveraged
- Propose 2 year agreement - \$40,000 annually



Evergreen Foundation

- Successful school greening across Canada
- 2016 pilot: 345 trees, 53 outdoor learning spaces designed (all municipalities)
- Propose 2 year agreement - \$10,000 per school board annually



Greening Strategy

Working with our local municipal partners

Implement projects in all nine local municipalities including:

- Environmental land protection and preservation projects
- Urban Forest studies and Forest management planning
- Community tree planting events
- Local Environmental Advisory Committee coordination and support
- Technical Working Groups and Forums

Together we achieve more...



Next Steps

- Continue with partnership implementation
- Increase promotion of subsidized tree planting
- Continue to advance key actions towards increasing forest and canopy cover:
 - Continued support for Urban Forest Studies with local municipalities
 - Implement short term actions of the York Region Forest Management Plan in collaboration with local municipalities and partners



GIVE HER A FOREST

Own land in York Region?
Grow memories.

Remember running through the woods as a kid?
*The fresh air.
The fallen leaves.
The freedom.*

Imagine creating those unforgettable experiences for your kids on your own property.

If you own two or more acres in York Region, we'll plant a forest for you. Experts will help you every step of the way — from funding assistance, to planning and planting, to tending your growing forest.

A forest is a gift that grows for generations.

Contact us to find out more.

GROW YOUR LEGACY