

# Resilience

in The Living City



Toronto and Region Conservation Authority  
**ANNUAL REPORT 2016**



## Message from the CEO

Imagine you're holding a rubber band. No matter how much you stretch, twist or contort it, it always manages to return to its original shape. That's resiliency – the ability to respond to stress and bounce back.

These days, resiliency seems to be everywhere. Resiliency planning is underway at the municipal level, with some even adding resiliency officers to their staff complement. Businesses constantly pursue resiliency in an ever expanding global market and organizations like Toronto and Region Conservation (TRCA), work to make our planet resilient in the face of climate change.

The GTA is home to more than five million people. It's also home to some truly stunning natural spaces. Nine rivers cut through our region, shaping the landscape and the lives of those who live here. There is untold beauty here, but also the crush of development. Finding a balance and preserving nature while wrestling with the very real effects of climate change is where we find resilience together.

Resilience is a part of everything we do. It's in the programs we teach to students of all ages. It's in the community events we host. It's even in the way we run our organization and interact with our partner municipalities. Our goal is to meet the challenges that come our way by being proactive rather than reactive, by anticipating and adapting to change, by seeing the storms on the horizon and making course corrections well ahead of time. Ultimately, resiliency is a muscle we are compelled to work every single day.

It's gratifying, then, that the Ontario government has taken steps to promote resiliency in the province. Recently, the Province's Coordinated Land Use Planning Review highlighted the importance of watershed planning as a key element in sustainable and resilient growth management in the Greater Golden Horseshoe. This show of support for the creation of thoughtful and balanced watershed plans is a step in the right direction – one that underscores our mission to protect thriving communities in the region.

As well, TRCA's Watershed Strategies team recently studied a number of priorities and actions released by the Province for their second phase of the *Conservation Authorities Act* review. Additionally, in representing the 36 conservation authorities across Ontario, TRCA staff recently provided feedback on the Ministry of Natural Resources and Forestry's *Environmental Bill of Rights*. Both submissions to the Province emphasized the move towards resiliency as an integral part of the long term growth of sustainable communities.

The new climate reality is just that – a reality. There's no more room for 'what ifs'. There is only moving ahead – all levels of government and the public, protecting our natural world, growing with care and being resilient in all that we endeavor.

Ultimately, if we choose to work together, we are sure to be like that rubber band and bounce back.

Thank you.



**Brian Denney**  
Chief Executive Officer



## Message from the Chair

English historian Thomas Fuller once said that we never know the worth of water till the well is dry. When it comes to the theme of Toronto and Region Conservation's 2016 Annual Report – resiliency – I can't think of a more fitting phrase.

For years, climate change has been used to describe why our mean temperatures around the globe are rising steadily, why the polar ice is melting or even why various species are being found in places they never were previously. And while the phrase 'climate change' has become commonplace and perhaps even overused, the time for debate is over. The time for planning and acting is now.

That's why I'm proud to work with the passionate and dedicated people of TRCA. For more than 60 years, this organization has been looking out for the environment, protecting greenspace and preserving biodiversity in our region. A healthy system of watersheds benefits not only the fish, birds and other wildlife – it benefits we humans too. It provides us with an outlet, a place to relax and escape the concrete jungle. It gives us room to breathe, to decompress and to reconnect with our friends and family. It's good for our economy too.

Building resilience into everything TRCA means the natural world we love is going to be here for the next generation to enjoy. It means our rivers, lakes and streams are drinkable, fishable and swimmable. It means our air is clean and we continue to look for balance in the way we develop our urban landscape. It means our ravines, forests, meadows and valleys are alive with wildlife of all kinds. All it takes is a commitment to embody resilience – and that's something TRCA does naturally.

On behalf of the Authority, I'd like to thank the staff and TRCA's many partners for another year of hard work in protecting and preserving nature here in the GTA.



A handwritten signature in cursive script that reads "Maria Augimeri".

**Maria Augimeri**  
Chair



# WATERSHED STUDIES AND STRATEGIES

57,619 sq. m

of land restored across TRCA's jurisdiction through the Young Tree Monitoring and Maintenance Program that tracks the health of trees and shrubs in our region.

1,500 m

new trail on the Etobicoke Creek Trail opened in 2016, connecting the City of Brampton to the Town of Caledon.

40

research themes related to climatology, hydrology and ecology analyzed in the *OCC State of the Climate Change Science in the Great Lakes Basin* report, produced with Environment and Climate Change Canada, the Ontario Ministry of Natural Resources and Forestry and McMaster University. The report provides key material for researchers, managers and decision makers.

2,050

flowers planted as part of the Gatineau Hydro Corridor Revitalization Project in the Scarborough Centre Butterfly Trail. The establishment of this meadow will help to mitigate the negative effects of climate change through increased pollinator habitat.

700 hrs

500 m of fencing, 32 Citizen Scientist volunteers and three turtle beaches were involved in the Heart Lake Road ecology study. TRCA and the City of Brampton installed fencing and a culvert to allow the safe passage of wildlife.

1,700

visitors to 18th annual Mill Pond Splash that engages the community about restoration work and environmental principles that will last a lifetime held in collaboration with the Town of Richmond Hill.

2,100

people visited the shore of both Highland and Duffins Creek as part of annual salmon festivals.

700

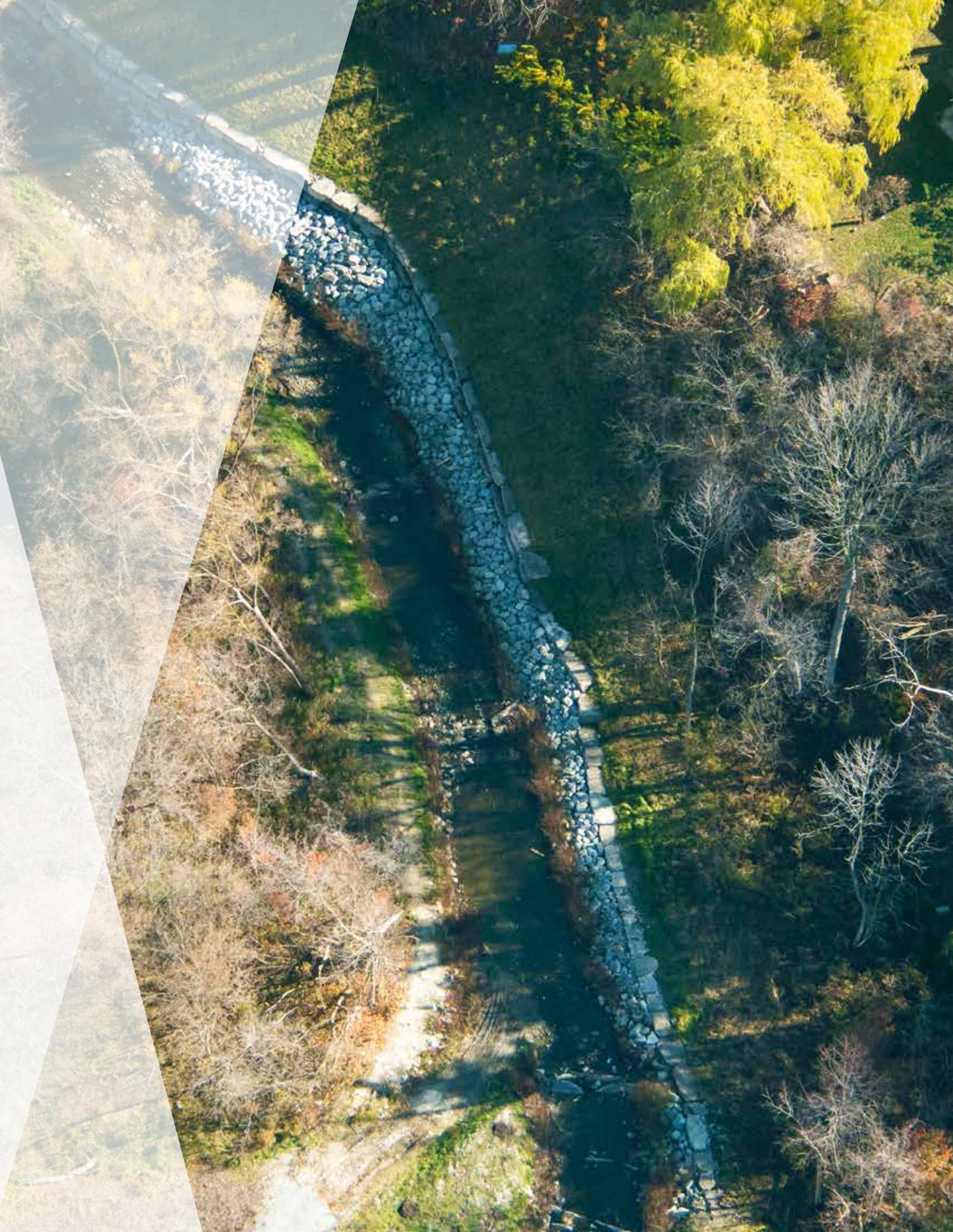
participants, 350 boats and 89 volunteers took part in the Manulife Paddle the Don – an event that creates a connection to the river and raises funds for watershed initiatives.

30 years

of actions taken in the waters of Lake Ontario on the shores of Toronto have resulted in significant progress made towards restoring the water, fish, wildlife and habitats, as reported in the Toronto and Region Remedial Action Plan's *Within Reach: 2015 Toronto and Region Remedial Action Plan Progress Report*. Now the waters are more swimmable, drinkable and fishable.

## Resiliency Highlights:

- Assessing the environmental health of the GTA is the focus of The Living City® Report Card. The 2016 edition, produced in collaboration with several partner organizations, is the most comprehensive in-depth analysis of environmental sustainability and highlights successes, challenges and opportunities for action by municipal and regional governments in the GTA.
- The current health of our city's trees was released in the *State of the Urban Forest*. Produced in partnership with Green Infrastructure Ontario (GIO) Coalition, this report combined data from 17 municipal and regional governments for this baseline assessment. It highlighted the many benefits and challenges of caring for our urban forest.
- Climate change vulnerability assessments for the City of Mississauga and the City of Vaughan were conducted by the Ontario Climate Consortium (OCC) to identify the risks the cities might face in a changing climate as well as vulnerabilities that exist in stormwater infrastructure. OCC increased the technical capacity of municipal staff to understand and apply vulnerability action steps.



# WATER RISK MANAGEMENT

26

agency representatives attended the annual the Floods Happen Municipal Workshop, providing an opportunity for first responders and emergency management professionals working in the GTA to discuss opportunities to improve operations across boundaries.

2,000 m

of flood control channel cleaned to restore the original flow capacity to maximize flow and reduce flood risk. These channels include Sheppard Channel, Malton Channel and Yonge/York Mills Channel.

1,474 m<sup>2</sup>

of valley slope stabilized and restored.

1,125 m

of new trail constructed and 902 m of existing trail restored.

500

inspections completed on TRCA dams to ensure structures are safe and performing correctly.

13

buildings protected against erosion and/or slope instability.

12,100

online interactions from 40 countries brought the page views for [trcagauging.ca](http://trcagauging.ca) to over 21,000.

2016

resulted in the completion of the completion of the Lower Don 1D-2D hydraulic model and floodplain mapping update, which generated updated regulatory floodplain mapping for over 500 ha. The enhanced animations and risk mapping products produced for this area can be used to better develop emergency plans and explore flood mitigation options around the Don River Valley and associated transportation corridors.

1,492 m

of streambanks were protected.

Final design

for the decommissioning of Albion Hills Dam was completed and removal of the structure will take place in 2017.

## Resiliency Highlights:

- TRCA's Flood Forecasting and Warning program plays a vital role by monitoring weather and watershed conditions and issuing flood messages. In 2016, the Emergency Operations Centre integrated updated Incident Management System (IMS) principles. Over 28 unique positions were developed and over 31 staff were trained.
- Resilient developments that complement existing land and water features rather than negatively impact them is the purpose behind the Wetland Water Balance Project. At TRCA's 15 wetland monitoring sites, water levels, groundwater flow and plant and animal species data is collected from 130 wells. From this information, hydrology models are created which engineers use to assess possible impacts of proposed developments on area wetlands. For example, this work is being carried out for the massive Seaton Development – Sideline 21 and 26 wetlands and Baif wetland.
- Assisting developers, consultants, municipalities and landowners implement sustainable storm water management practices in their watersheds is the focus of the Low Impact Development Treatment Train Tool (LID TTT). This tool was created by Lake Simcoe Region Conservation Authority (LSRCA), Credit Valley Conservation (CVC) and TRCA.



# REGIONAL BIODIVERSITY

12,577,016

monitoring data records collected in 2016 that provide the foundation on which important conservation decisions are made.

133+

projects implemented by The Restoration Projects Group and continued planning for 39 projects.

1,978

habitat structures restored; including bird nest boxes, turtle basking logs, bee condos, log tangles, salamander cookies, snake hibernacula, raptor poles, perching poles and tern rafts.

184,960

biodiversity records collected help TRCA departments like Planning and Development in their reviews, help guide restoration activities and contribute to reporting on the overall state and health of our watersheds.

102.67 ha

of wetland, riparian and terrestrial habitat restored. That's over 1 km<sup>2</sup>, equivalent to the area of 293 Yonge-Dundas Squares!

77

monitoring and restoration partnerships and/or collaborations supported.

10,412 m

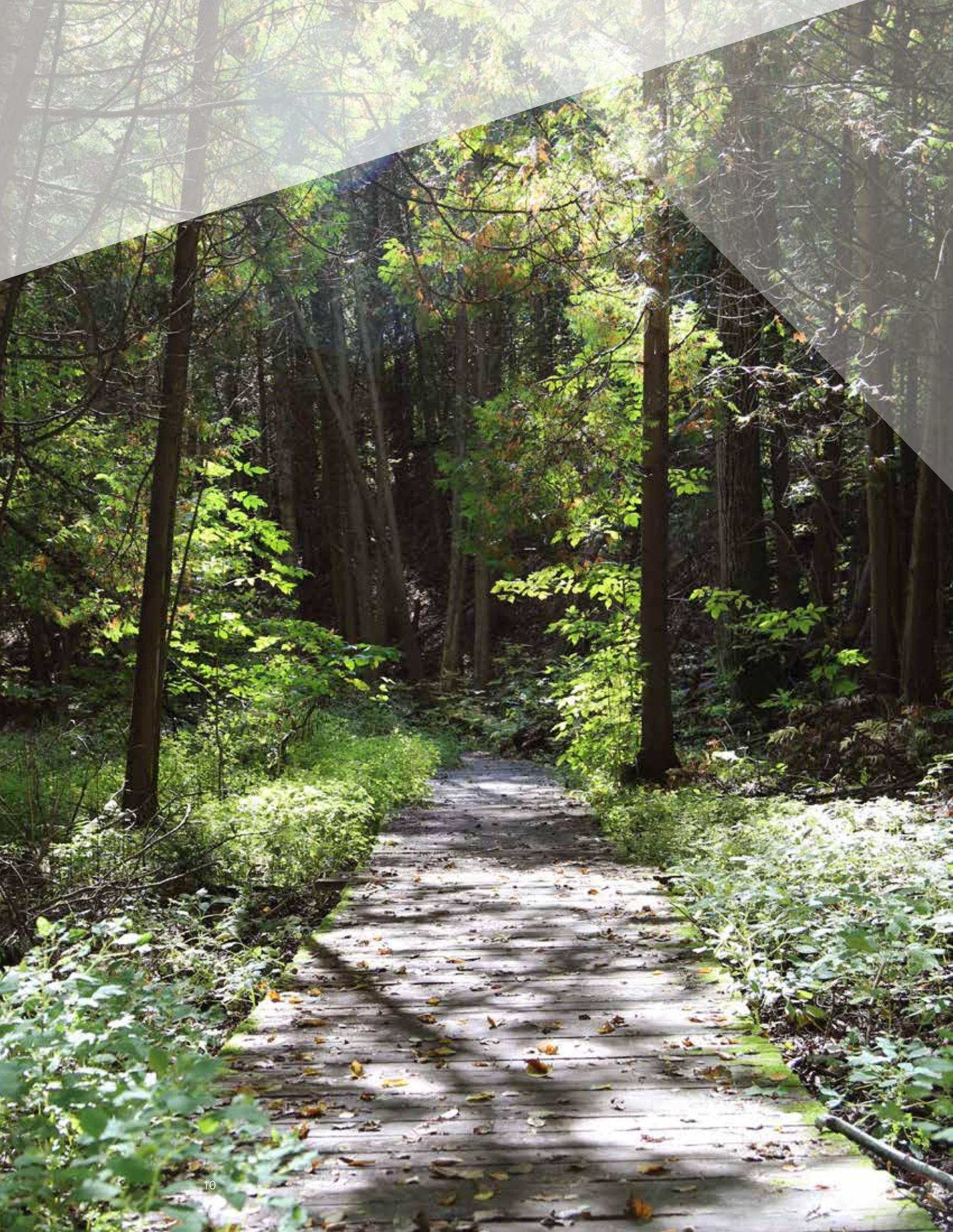
of riparian, stream and shoreline restored. At an average walking speed, it would take you over two hours to walk the length of this restoration.

101,166

native trees and shrubs planted at 110 planting sites covering over 65 ha.

## Resiliency Highlights:

- The resiliency of our species and spaces in the face of climate change and urbanization is found through quantitative study. TRCA's Regional Watershed Monitoring Program collects data on terrestrial and aquatic habitat and species, water quality, water quantity and climate and hydrology. The information is invaluable as it helps inform a host of policy decisions in the face of environmental stressors and urbanization.
- Little wonders – The endangered Redside Dace, a red and yellow striped minnow is as a useful indicator of watershed health. According to the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), the Redside Dace is especially sensitive to environmental disturbance and its presence or absence can indicate the state of a watercourse's health. The Golden Horseshoe Region contains 80% of Canada's Redside Dace population – much in urban areas or those slated for development. Urban development is considered the most immediate threat to this species in Canada, so TRCA habitat restoration projects for Redside Dace benefits watersheds on the whole.
- The Cell 2 Wetland Creation Project at Tommy Thompson Park is the definition of resiliency on Toronto's waterfront. A 9.3 hectare coastal wetland, this project transformed a construction waste disposal facility into a rich, coastal habitat for fish and wildlife. Cell 2 builds on the work completed at the adjacent Cell 1 Wetland, providing habitat for marsh birds, turtles, amphibians, small mammals and native fish.



# GREENSPACE SECUREMENT & MANAGEMENT

2,962 ha

of TRCA greenspace assessed to help identify changes in conditions and make links between human and/or environmental changes and the impacts on the greenspaces.

2,500

people introduced to the importance of cultural heritage through public outreach, and educational programs led by TRCA Archaeology department.

17

TRCA projects requiring consultation with First Nations and Métis communities were coordinated through Archaeology staff.

3,950 kg

of waste removed from TRCA properties.

15

TRCA properties inspected according to the TRCA Trails Standard Operating Procedures, ensuring that risks and hazards along trails are identified and mitigated, thereby reducing our risk and providing quality user experiences.

10

public engagement sessions held, including stewardship committee meetings, public information sessions and advisory committee meetings to help promote community involvement in greenspace and trail management.

44 km

of trail mapped using specialized High Efficiency Trail Assessment Process (HETAP) equipment to record accessibility factors identifying trail features such as accessibility.

143.3 km

of authorized trail audited to ensure proper trail alignment and conditions. 10.2 km of unauthorized trails inventoried which informs trail closures and help mitigate our risk by eliminating unsafe trails.

53

individual archaeological assessments conducted on TRCA properties.

## Resiliency Highlights:

- Joining together to create a resilient connection built on conservation is the innovation behind TRCA's partnership with Green Durham Association. In 2016, the collaboration and funding allowed TRCA to continue to provide a community liaison staff position for TRCA's East Duffins Headwaters Properties. A management plan was created and new trail posts, post markers and trail head maps were produced. This local conservation partnership allows TRCA to further its conservation efforts in an area with limited resources available for land and trail management.
- In 2016, the first year of TRCA's Greenlands Acquisition Project, TRCA acquired 30 hectares of floodplain land increasing its land holdings to 18,145 secured for both flood protection and greenspace conservation. This allowed TRCA to expand access to greenspace, establish trail and ecological connections, ensure clean and abundant groundwater supplies and provide protection to ecologically sensitive lands.
- TRCA, the Town of Richmond Hill and York Region celebrated the completion of the main trail in Oak Ridges Corridor Conservation Reserve in the autumn of 2016. The 5.2 km trail forms a section of Lake to Lake Cycling Route and Walking Trail, which will provide a continuous 121 km trail from Lake Ontario to Lake Simcoe when completed.
- With an eye on ensuring safety and resilient land management, TRCA acquired a site adjacent to the Scarborough Bluffs on Fishleigh Drive for a total of approximately \$2M through City of Toronto erosion control funding. A 4.6 h Conservation Easement was also acquired in Pickering adjacent to Carruthers Creek.



## Resiliency Highlights:

- Community resilience is a concept that embraces the principle of social equity. That's why, in 2016, Black Creek Pioneer Village cultivated community partnerships to create culturally rich and accessible experiences. These included collaborating with the Town of Aurora, the McMichael Art Gallery and the Toronto Public Libraries. Toronto Community Living had free access to the museum for a photography course and 50 Syrian refugees toured the Village through the Institute for Canadian Citizenship. The program introduces refugees to some of Canada's cultural facilities.
- In 2016, Parks and Culture developed a master site plan for Albion Hills Conservation. TRCA welcomed feedback from local councilors, Authority members and residents. Parks and Culture then focused on Lakeview restoration. Once completed, the natural form and function of the Centreville Creek channel will be reestablished, fish barriers mitigated, aquatic, riparian and floodplain habitat improved and more education and outreach opportunities created.
- Giving nature a helping hand is part of resiliency. That's why The Living City Foundation organized a Bring Back the Bees event, creating a wildflower garden at Black Creek Pioneer Village. As well, more than 80 community members from the Jane-Finch neighborhood assisted in building a rain garden with native plants. At Bathurst Glen Golf Course, six bat boxes and more than 4,047 sq. m butterfly meadow were established.

# TOURISM & RECREATION

950,000

people visited Parks and Culture facilities to spend quality time in nature, participate in health-promoting activities, and enjoy brand new recreational offerings.

80,000

people ditched the car and chose to walk, jog, run, cycle, skateboard, rollerblade, or use a personal mobility device to enter a TRCA Park – which always means free admission as part of TRCA's commitment to encouraging green modes of transportation.

27

commercial film shoots hosted at Conservation Parks in 2016 as TRCA continues to build rapport and partnerships with local film production companies, all while maintaining environmental integrity.

10,142

visitors, including 1,000+ new Canadians, enjoyed free admission to Black Creek Pioneer Village thanks to the facility's growing roster of community outreach programs and continued commitment to providing culturally rich heritage experiences that are accessible to all.

4,047 m<sup>2</sup>

of butterfly meadow created at Bathurst Glen Golf Course as part of the facility's ongoing commitment to meeting and surpassing Audubon Cooperative Sanctuary standards and demonstrating best practices in integrated pest management.

## Social media

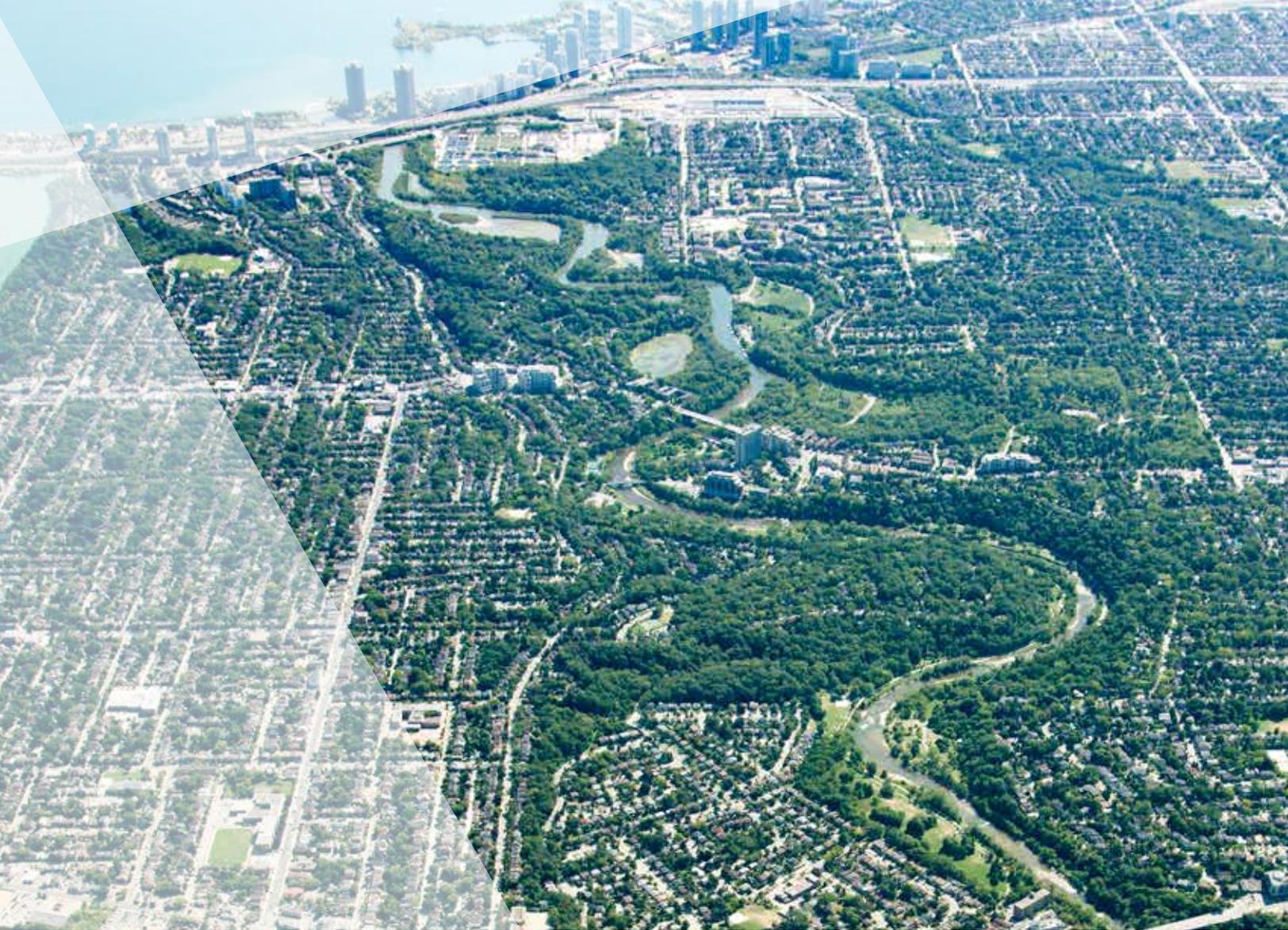
activities and followers for TRCA Parks growing at rapid speed; 4,788,500 total reach on Facebook and over 3,000 Twitter followers stay connected with all things outdoors.

550

native wildflowers and shrubs were planted in Black Creek Pioneer Village's brand new rain garden—an environmentally significant community-building project that was funded by the Great Lakes Community Fund and which engaged over 80 members of the Jane-Finch neighborhood to participate.

50

Syrian refugees experienced Black Creek Pioneer Village through Ahlan Canada—an exciting program developed by the Institute of Canadian Citizenship to welcome Syrian refugees and provide them with family-friendly tours of Canada's cultural attractions.



## Resiliency Highlights:

- When it comes to resiliency planning, we “adapt and mitigate”, managing our resources for future severe climate changes. We do this through policy, technical innovation and development and infrastructure implementation. We aim to protect the woodlands, the wetlands and valley corridors, remediate flood vulnerable areas, integrate hazard management and safety into development processes, assess regional impacts and manage the natural and man-made systems for functional integrity.
- TRCA was actively engaged with the Province and the Crombie Panel to promote policy changes to achieve resilient communities. The subsequent draft amendments to the *Greenbelt and Growth Plans* are aimed to strengthen requirements for watershed planning, promote green infrastructure and provide direction to plan for climate change mitigation and adaptation.
- The City of Toronto and TRCA have been working together with a wide range of stakeholders since 2015 to develop a Toronto Ravine Strategy. This framework will guide policy, investment and stewardship related to the ravines, particularly as intensification and issues of ravine use and climate change put pressures on the integrity of these beloved city greenspaces.
- The importance of biodiversity, resilience and risk reduction is incorporated in subdivisions and site plans, road networks and supporting infrastructure. In Mayfield West (Phase 2) in Caledon, the Secondary Plan represents resilience with its enhancement of several linkages between natural features for a more robust natural heritage system in Caledon’s new growth community.
- TRCA and the City of Vaughan are finalizing an extensive OMB process that works with landowners to remove flood hazards on their properties. An exciting river renewal for Black Creek provides a restructured natural corridor that flows through Vaughan’s new downtown and assists landowners to realize their development potential within a flood-safe urban hub.

# PLANNING & DEVELOPMENT REVIEW

## In 2016

approval received for TRCA and Richmond Hill to conduct an environmental assessment for Flood Plain Remediation in the Yonge-Elgin Mills corridor. This study is an excellent model of creative flood remediation for an existing flood vulnerable commercial/industrial area requiring urban revitalization.

## 1,200

new and current planning applications processed through the Planning and Development team.

## 1,301

new permit applications issued compared to 1,194 in 2015.

## 125 EAs

reviewed by EA planning team assessing impacts on our natural systems, an increase of 40% from 2015. Many of the EAs were for municipal rapid transit systems aiming to mitigate the impacts to climate change by providing faster and more reliable service, reducing dependency on the use of cars, while examining ways to be climate resilient through innovative design of the system and infrastructure.

## 1,180

permits issued within the TRCA jurisdiction.

## 23

municipalities collaborated during a workshop hosted in partnership with with Metrolinx on the development of the Metrolinx compensation protocol, striving to compensate for the loss of ecosystem services.

## 50

active OMB Hearings in 2016. This number has stayed steady over the last three years, reflecting the importance of the work our staff take on when dealing with contentious issues and complex negotiations.



## Resiliency Highlights:

- In 2016, the Claremont Field Centre began its transition into a Community Engagement Centre. This new, revitalized space will serve as a hub to bring people together to share experiences. With continued population growth in Durham Region, there is a growing need for a community space that supports healthy, active living and provides inclusive programming for all visitors.
- Monarchs for Mental Health is a project developed by the Monarch Teacher Network of Canada and run by TRCA. Funded by the Ontario Seniors' Secretariat, the project seeks to improve physical and mental health for seniors through hands-on activities. TRCA staff delivered three workshops on Monarch butterflies and habitat creation.
- Inspiring resiliency for the future is the focus of the Environmental Leaders of Tomorrow initiative. This innovative program combines in-school classroom environmental learning with an overnight trip to one of Ontario's leading outdoor education centres. This gives students a chance to connect with nature and develop ecological literacy and leadership skills.
- Building employment resiliency is what the longstanding partnership with TRCA's PAIE program and Toronto Employment Services, (TESS), is all about. By granting access to employment supports, TESS delivers workshops to participants and access to their database for job posts, internships and facilitates the pre- arranged hire of participants through TRCA host employers.

# EDUCATION & OUTREACH

24,981

individuals participated in TRCA's outreach education programs including the Watershed on Wheels Program, Aquatic Plants Program and Yellow Fish Road Program.

6,000

students and teachers from eight GTA school boards visited TRCA Field Centres; Claremont, Lake St. George and Albion Hills to connect with the local environment and practice sustainable living.

2,704

enthusiastic students living in some of the Province's most disadvantaged communities participated in TRCA's Integrated Learning Programs, where in-school classroom learning is combined with an overnight trip to one of Ontario's leading outdoor education centres.

30 m

boardwalk built, one km of trail restored and two cabins refurbished in the Summer of 2016 for Bolton Camp redevelopment project.

21

Rouge Days events held over five days in June celebrated our connection with the Rouge River watershed.

In 2016

The Living City Campus has become an official Test City Site for the Vaughan International Commercialization Centre.

80%

of participants were successful in accessing employment opportunities in their field through the PAIE program.

2,034

school and public program participants took part in Tommy Thompson Park Education led initiatives, which included messaging about positive human impact on biodiversity.

2nd

Annual My Great Lakes, My Future Student Conference included 200 secondary SHSM students and guests from four GTA school boards at Tommy Thompson Park and Harbourfront Centre which was supported by three provincial ministries and many partners.

38

youth and 12 partners engaged for Bolton Camp redevelopment, a multi-year redevelopment project that includes the retrofit and renewal of 102.79 ha of public greenspace and over 50 historic buildings.

7,498

people engaged in 266 English as a Second Language Instruction for Newcomer (LINC) presentations through TRCA's multicultural program.

226 hrs

of training delivered by PAIE staff to the program participants to get them ready for employment in Canada.

## Natural Minds

Lasting Connections program was piloted, engaging Torontonians living with mental illness to spend time in the City's natural spaces.



## Resiliency Highlights:

- TRCA's Partners in Project Green works in collaboration with organizations to realize bottom line results in the areas of Energy Performance, Waste Management, Water Stewardship and Engagement. This innovative initiative is a model of business and environmental resiliency, connecting 105 members currently in our region.
- Feeding our communities now and into the future is the focus of the TRCA Urban Agriculture program. In 2016, much was done to promote local food production awareness. The #IEatLocal Twitter party connected local food producers, community organizations and residents in a vibrant discussion.
- Climate mitigation and adaptation actions help increase community resilience. That's what the Sustainable Action Retrofit Plan program aims to do. The Black Creek SNAP, for example, is engaging homeowners to conserve energy, reduce basement flood risk and plant trees. More than 88% have adopted one retrofit action already.
- TRCA's Rural Clean Water Program (RCWP) continues to put best management practices in place for water quality improvements, environmental enhancement and sustainability and climate change mitigation and adaptation for rural landowners to benefit from.

# SUSTAINABLE COMMUNITIES

4,570 tonnes

in eCO<sub>2</sub> emission and 132 million litres of water reduced by Partners in Project Green Energy Leaders with 107 projects implemented. That equals to \$4.16 million annual savings.

1,700 tonnes

of GHG emission reductions, 41,000 GJ of energy savings, 8,000 m<sup>3</sup> of water savings and \$700,000 in cost savings realized for 10 municipalities across the GTA, through Mayors' Megawatt Challenge.

## Phase 2

Memorandum of Understanding signed by Region of Peel, Credit Valley Conservation and TRCA to proceed with construction of Lakeview Waterfront Connection Project. In addition Fisheries and Oceans Canada and Navigation Protection Act approvals were received to proceed with the Lakeview Waterfront Connection Project.

88

electric vehicle stations installed through Partners in Project Green and municipal and private partners.

71

school boards in Ontario are now part of The Sustainable Schools program to benchmark energy performance across the region.

6,130

native trees and shrubs planted, 1406 metres of fencing installed, and 15.6 ha of habitat created and/or preserved through Rural Clean Water Program.

## Black Creek SNAP

one of four finalists for a C40 Cities Award under the Sustainable Communities category, an award to recognize leading projects for climate action.

In 2016

Partners in Project Green diverted 5,173 tonnes of waste, reduced 5,718 tonnes of eCO<sub>2</sub> and offset 229.9 million litres of water.

10,000 tonnes

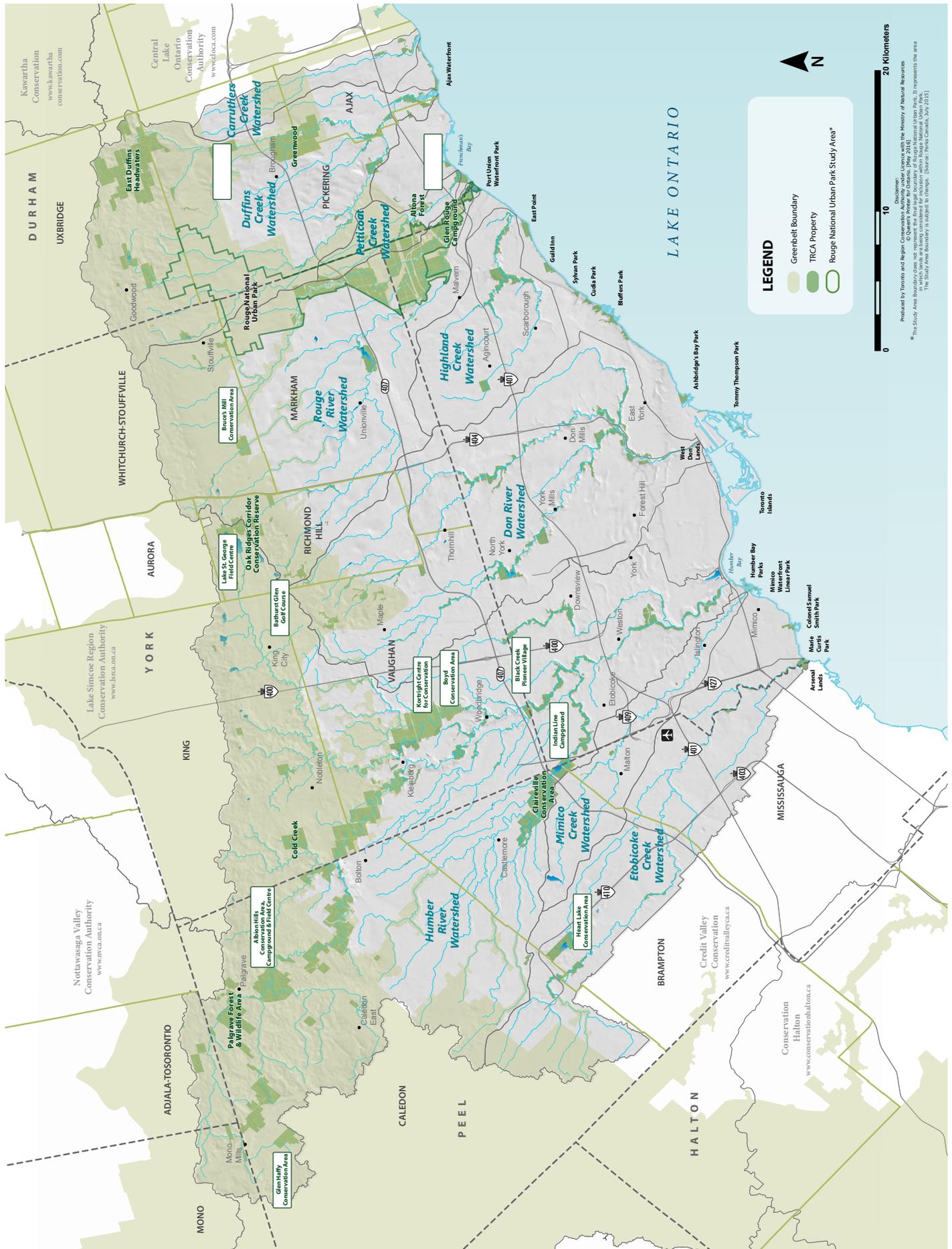
of GHG emission reductions, 94,000 m<sup>3</sup> of water savings, 181,000 GJ energy savings and \$4,000,000 in cost savings for The Greening Health Care program participants; 42 member hospitals within Ontario and an additional 13 hospitals from Alberta.

## Cities100

included The Black Creek SNAP as one of 100 leading city climate change solutions from around the world that also provide social co-benefits and community development.

600+

attendees at the annual Black Creek Community Farm Festival toured the farm, ate locally sourced food and participated in activities promoting healthy and local food production.



**LEGEND**

- Greenbelt Boundary
- TRCA Property
- Rouge National Urban Park Study Area\*



Disclaimer:  
 Produced by Toronto and Region Conservation Authority in partnership with the Ministry of Natural Resources  
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 \*The Study Area Boundary is being considered for inclusion within the Rouge National Urban Park,  
 in which lands are being considered for inclusion within the National Urban Park.  
 The Study Area Boundary is subject to change. (Source: Parks Canada, July 2015)

# CORPORATE SERVICES

2,698

Geomatics requests processed by the GIS team, up from 1,941 in 2015.

In 2016

TRCA Head Office achieved a diversion rate of 84%; meaning that of all the waste generated in the office only 16% weight went to garbage, the rest was recycled, reused, or composted.

173

new PCs and Laptops purchased and deployed.

1

unique and interactive Augmented Reality Sandbox built that allows users to create topography models by shaping real sand. It is now permanently located at Albion Hills Field Centre.

85%

diversion achieved collectively by the Construction Waste Diversion Pilot Project at TRCA. By diverting construction waste material we can support local green jobs within the circular economy, save landfill space and conserve natural resources.

28,693,292,177

of LiDAR data points acquired in jurisdiction wide data delivery to help guide programs and projects for TRCA.

2,165

IT request tickets submitted and completed in 2016 for TRCA staff.

15

physical servers and 35 virtual servers managed by IT staff for TRCA internal networks.

While this Annual Report charts the progress made through our efforts in 2016, resiliency is something that is forever stitched into the fabric of our programs and services. Here, we highlight initiatives that are ongoing and will bring us ever closer to a sustainable region where we work, live and play in resilient ways. These are just some of the programs aimed at helping us achieve that goal.

## Rouge National Urban Park

Rouge National Urban Park is a nationally protected area in an urban setting. A rich assembly of natural, cultural and agricultural landscape, it's home to amazing biodiversity and some of the last working farms in the GTA. Parks Canada and TRCA have identified restoration projects designed to improve connectivity, natural cover, biodiversity, hydrology and agricultural lands. A healthy watershed is more resilient in the face of climate change, storm events and urban development. Installing monitoring stations in key locations, allows the measurement of ecological gains, agricultural functionality and changes in watershed health.

## Next Generation of Watershed Plans

Resiliency has been built into the development of TRCA watershed plans since the 1980s. Periodically they've been updated to reflect and adapt to changes in watershed conditions, key drivers and policy. Now, with more pressures coming to bear in our region, TRCA has developed a new watershed planning program to align with Conservation Ontario's Integrated Watershed Management framework.

The planning process aims to: develop a shared vision for a future watershed state with partners and stakeholders; understand watershed natural systems, processes, functions and thresholds; analyse the effects of land use and climate change on watershed health; guide integrated policies to achieve desired watershed goals and; mobilize on-the-ground implementation of watershed plan priority actions.

## Toronto and Region Remedial Action Plan (RAP)

In 2016 the Toronto and Region Remedial Action Plan released *Within Reach: 2015 Toronto and Region Remedial Action Plan Progress Report* which documents the progress made toward restoring Toronto's waters, fish, wildlife and habitats. Implementation of remedial and restoration actions over the past 30 years have made the waters of Lake Ontario on the shores of Toronto becoming more swimmable, drinkable and fishable.

But reaching the goal of delisting doesn't mean our work ends. Urban growth, pollutants and climate change will create even greater challenges for our waters. That's why our efforts will continue through partnerships, policies and legislation to maintain a sustainable ecosystem in the Toronto Region.

## Ontario Climate Consortium (OCC)

The potential impacts of climate change are the sole focus of the OCC. It continues to help build resiliency at the municipal level as it did in 2016, conducting climate change assessments for both the City of Mississauga and the City of Vaughan. The work explored the risks cities might face in a changing climate and the vulnerabilities that may exist in stormwater infrastructure.

TRCA's OCC hosted the Community Energy Knowledge Action Partnership (CEKAP). Funded through the Social Sciences and Humanities Research Council (SSHRC), OCC leads the initiative, bringing together researchers, policy practitioners and experts to explore building low carbon and climate resilient energy systems in communities.

# Toronto and Region Conservation Authority Participating Municipalities and Members 2016

## TOWN OF MONO & TOWNSHIP OF ADJALA-TOSORONTIO

G. Mason

## THE REGIONAL MUNICIPALITY OF YORK

D. Barrow \*  
M. Di Biase (Vice Chair) \*  
J. Heath  
L. Pabst  
G. Rosati

\*Executive Committee Members

## THE REGIONAL MUNICIPALITY OF DURHAM

K. Ashe  
J. Ballinger\*  
C. Jordan \*

## THE REGIONAL MUNICIPALITY OF PEEL

C. Fonseca \*  
J. Innis \*  
M. Mahoney  
J. Sprovieri  
J. Tovey \*

## CITY OF TORONTO

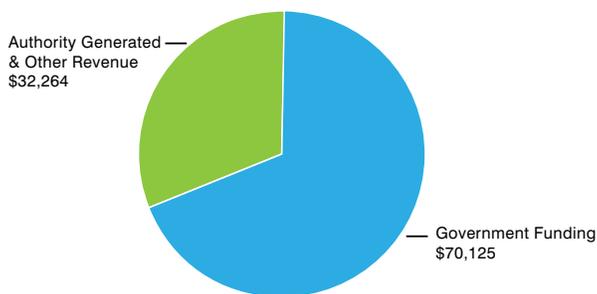
P. Ainslie  
M. Augimeri (Chair)\*  
R. Chopowick (May - Dec.)  
V. Crisanti \*  
G. De Baeremaeker \*  
J. Di Ciano  
J. Drake  
R. Ford (Jan. - Mar.)

R. Hoinkes (Jan. - May)  
M. Kelleher  
M. Khan (Jan. - Jul)  
G. Mammoliti \*  
M. Mattos \*  
J. McKelvie  
R. Moeser \*  
F. Nunziata (May - Dec.)  
A. Perruzza



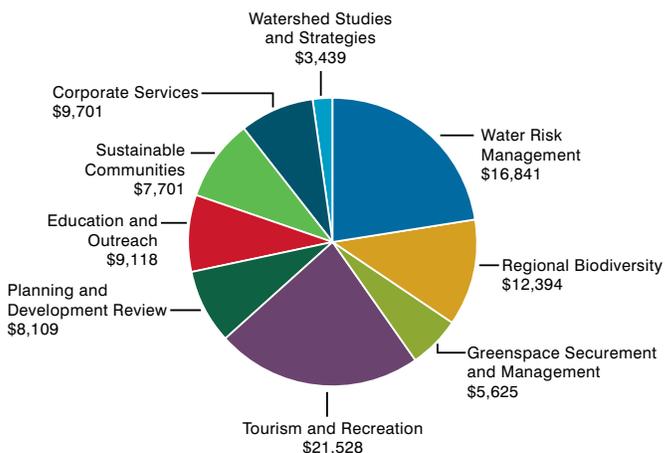
## Toronto and Region Conservation Authority – Statement of Operations Year Ended December 31, 2016

### REVENUE (in thousands of dollars)



**TOTAL = \$102,389**

### EXPENDITURES (in thousands of dollars)



**TOTAL = \$94,456**

TRCA's amortization of tangible capital assets, which amounted to \$7,374 in 2016, is reflected above. But, not reflected above are TRCA's acquisitions and contributions of tangible capital assets, which amounted to \$13,878 in 2016. Please refer to TRCA's audited financial statements which are available online.

