

zero hour*

Toronto and Region Conservation
Annual Report 2006



* the scheduled time for the start of an operation or action,
especially a combat operation of great size.

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The background of the entire page is a photograph of a body of water, likely a lake, under a cloudy sky. The water is dark and occupies the bottom half of the image. The sky is a mix of grey and blue, with some lighter patches where the clouds are thinner. The overall tone is somewhat somber and naturalistic.

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Our vision: The quality of life on Earth is being created in rapidly expanding city regions. Our vision is for a new kind of community—The Living City®—where human settlement can flourish forever as part of nature's beauty and diversity. **Our mission** is to work with our partners to ensure that The Living City is built upon a natural foundation of healthy rivers and shorelines, greenspace and biodiversity, and sustainable communities.

With over 50 years of experience, Toronto and Region Conservation (TRCA) helps people understand, enjoy and look after the natural environment. Our vision is for The Living City®—a cleaner, greener and healthier place to live, for you today and for your children tomorrow. For more information, call 416-661-6600 or visit us at www.trca.on.ca



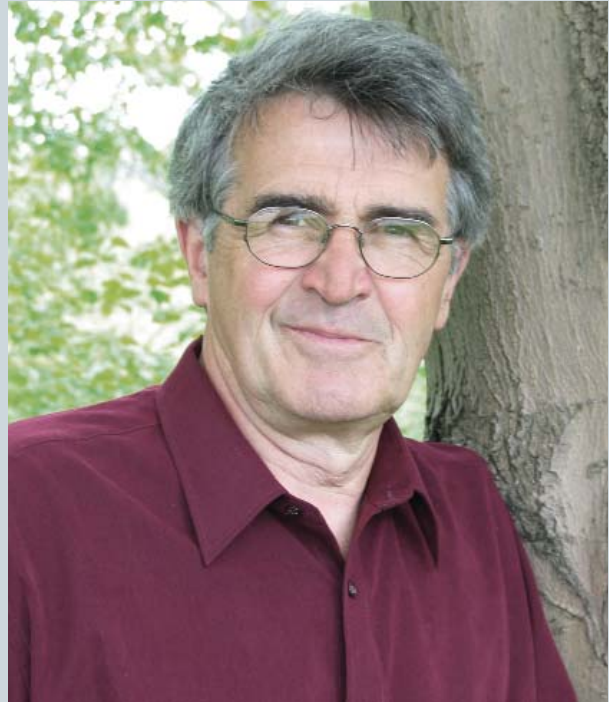


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As we completed our first 50 years of operation, I was proud once again to lead Toronto and Region Conservation (TRCA) through another year of exciting and critical environmental work in the Toronto region. As our region has transformed from a primarily rural landscape to urban form, the type and magnitude of environmental concerns have remained the same in many aspects, while significantly changing in others. The importance of TRCA's role in flood protection was reconfirmed with the August 19, 2005 flood, resulting in renewed attention to our flood management practices in 2006. At the same time, TRCA has expanded its role in the energy sector, as it is imperative that we focus on energy reduction and renewable energy sources in an effort to mitigate against climate change and the effect it is expected to have on our watersheds in the next 50 years. Waterfront projects remain a priority, receiving necessary additional funding and attention through the relationship with the three levels of government through the Toronto Waterfront Revitalization Corporation.

The year 2006 was my final year as chair of TRCA, ending my 23 years of service to the organization—the last 11 years as chair. I am thrilled at what TRCA has accomplished during my tenure. This leading environmental agency has continually taken the long-term view on protection of the Toronto region. This strength will not change into the next 50 years, as projects and programs are undertaken for the benefit of the environment, the people and communities within its jurisdiction.

message from the chair



It is my vision that TRCA will continue to focus on sustainable community development in this increasingly urbanizing region, while protecting the natural environment for all in The Living City.

As this is my final annual report, I would like to express a sincere thank you to all staff and board members for their dedication that has always been above the norm.

Many thanks to everyone and keep up the good work.

A handwritten signature in black ink that reads "Dick O'Brien".

Dick O'Brien

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Our new strategic plan, *Moving Toward The Living City*, released at our 50th annual meeting on February 24, 2006, focuses on the urgent need for a coordinated, community-driven response to climate change. Throughout 2006, the unprecedented growth in public awareness about environmental issues in general and climate change in particular confirmed that TRCA's strategic directions are valid. The challenge now is to turn the awareness into action and measurable improvements. Toronto and Region Conservation will continue to develop and implement leading-edge programs for energy efficiency and renewable energy application at every opportunity, as we did throughout 2006.

While governments at all levels are starting to say the right things about the climate change imperative, it continues to be a struggle to secure the necessary financial support for programs that can achieve lasting improvements. We appreciate the new partnerships with many diverse groups, including Environment Canada, Powerstream, Ontario Power Generation, Orlando Corporation, SmartCentres, Federation of Canadian Municipalities and the Royal Bank, to name just a few. It is progressive leaders like these who are beginning to see the business case for dealing with climate change and transforming the market place to capture the opportunities for cleaner and more efficient technologies. Identification and celebration of leading Canadian sustainable technologies and concerted efforts to incorporate new approaches into the process of city building will continue to be a priority for our innovative staff.

In the more conventional parts of TRCA's business—dealing with biodiversity and healthy rivers and shorelines—incredible progress continued throughout 2006. The adoption of the Terrestrial Natural Heritage System Strategy by the Authority represented a new era of planning for biodiversity as part of the urbanization process. The completion of the first phase of the Port Union Waterfront Park was the culmination of over 35 years of patient, concerted effort by the community and the Authority. The overwhelming community response to the project was a personal highlight for me.



message from the CAO

The work at the mouth of the Don River to control potential flooding, give some green space back to the river and connect the new West Don Lands community to the waterfront is one of the most important revitalization projects in the country. Toronto and Region Conservation is proud to be leading this project for the Toronto Waterfront Revitalization Corporation and the partnership it represents among the City of Toronto, the Province of Ontario and the federal government.

The Kettle Lakes Nature Reserve in Richmond Hill, where construction of a five-kilometre trail system allowed the public to begin exploring this major new open space system along the Oak Ridges Moraine, represents the Authority's ability to implement important public policy objectives on behalf of many partners.

Sustainable communities also must address social equity issues. Toronto and Region Conservation's efforts to provide the first Canadian experience for internationally trained professionals through the Professional Access and Integration Enhancement (PAIE) program, is an early example of our growing ability to address economic and social objectives as part of our core environmental business.

We would not have enjoyed such an outstanding year without the support of our retiring chair, Dick O'Brien, and the members of our board who continue to support and challenge the staff. The staff team is continuing to grow in size, expertise, creativity and energy. We are well positioned to continue the traditions of TRCA and face the unique challenges of the next 50 years.



Brian Denney



1. Over one billion human beings have no access to safe water. Nearly 1.8 million children die every year of diarrhoeal disease.

Source: Leonard DiCaprio Eco-Site,
[www.leonardodicaprio.org/
whatsimportant/water.htm](http://www.leonardodicaprio.org/whatsimportant/water.htm)

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**“Be the change
you wish to see
in the world.”**
—Mahatma Gandhi

healthy rivers and shorelines— the lifeblood of our city region

2006 highlights

- Source protection planning gained momentum in 2006 when the *Clean Water Act* received Royal Assent on October 19.
- Toronto and Region Conservation and the Toronto Waterfront Revitalization Corporation (TWRC) officially opened the Port Union Waterfront Park—Phase 1 to the public.
- Construction of the five-kilometre primary trail through the 428-hectare Kettle Lakes Nature Reserve in the Town of Richmond Hill was completed.
- Working closely with TWRC, great progress was made to address flood protection and naturalization of the mouth of the Don River.

healthy watersheds = healthy communities

As global temperatures continue to rise and extremes in our weather become increasingly unpredictable, communities are beginning to recognize the risks that a changing climate represents and have begun to ask more questions. Particular interest surrounds the causes of the change, and how the change will affect communities and the environment into the future. We all need to know what we can do to mitigate and adapt to a changing climate.

Climate change is a result of a build-up of greenhouse gas (GHG) emissions in the atmosphere, which have been markedly increasing since the dawn of the industrial revolution. Increased amounts of these GHGs trap reflected solar radiation, leading to general increase in overall global temperatures. While GHGs occur naturally, the increases, which are the cause of climate change, are primarily from industry and transportation. The impacts of these increases in GHGs are aggravated indirectly from deforestation and the general reduction of greenspaces.

Climate change brings home the very important message of conservation, which is the foundation of Toronto and Region Conservation's (TRCA's) The Living City vision. Toronto and Region Conservation is committed to initiating both mitigative and adaptive actions, both in the short-term and long-term in response to climate change, and exemplifying leadership to support our communities and partners in dealing with the climate crisis.

On a watershed scale, some of the expected effects of climate change include:

- Overall increase in risk of extreme and erratic weather.
- Increase in risk of heavy-rapid rainfalls.
- Increase in risk of flooding and drought events.
- Increase in risk for bank erosion.
- Increased risks for flooding and erosion will lead to:

1. Increased water turbidity, decrease in water quality.
2. Increased stress on aquatic and terrestrial biodiversity.
3. Increased stress on water management structures.

Toronto and Region Conservation understands that climate change will exacerbate the stresses already present in our watersheds and, therefore, believes that a comprehensive approach, which includes both mitigative and adaptive actions, is needed to both reduce and cope with the effects of climate change. We have reached the zero hour.

**“You look at that river
gently flowing by.
You notice the leaves
rustling with the
wind. You hear the
birds; you hear
the tree frogs. In the
distance you hear
a cow. You feel the
grass. The mud gives
a little bit on the river**

bank. It's quiet; it's peaceful. And all of a sudden, it's a gear shift inside you. And it's like taking a deep breath and going, "Oh yeah, I forgot about this."
—Al Gore in the opening monologue of *An Inconvenient Truth*

source water protection

Toronto and Region Conservation is utilizing our expertise in watershed management and moving beyond traditional mandates to achieve a sustainable future, particularly in protecting our water. Source protection planning gained momentum in 2006 when the *Clean Water Act* received Royal Assent on October 19. Toronto and Region Conservation continued work begun in 2005 on watershed characterization, producing a draft interim watershed characterization report for our jurisdiction. Using regional monitoring data, the York-Peel-Durham-Toronto groundwater models and extensive GIS data layers, the Interim Characterization Report represents the first jurisdiction-wide roll-up of environmental data into one document in many decades.



2. Global sea levels could rise by more than 20 feet with the loss of shelf ice in Greenland and Antarctica, devastating coastal areas worldwide.

Source: *An Inconvenient Truth > The Science*, www.paramountpictures.co.uk/aninconvenienttruth/thescience/

Aerial view of Tommy Thompson Park and Toronto's waterfront

The Province of Ontario continued to provide funding support of source protection activities including work on a conceptual water budget for TRCA to initiate water quantity evaluation for the area in advance of risk assessments. As the lead agency within the proposed CTC Source Protection Region (comprised of Credit Valley, Toronto and Region and Central Lake Ontario conservation authorities), TRCA is responsible for overall project management of the conservation authorities' source protection activities within the CTC region. In 2006, TRCA began regular meetings with our municipal partners through the establishment of the CTC Municipal Technical Advisory Committee, which provides advice on CTC source protection work such as the watershed characterization and conceptual water budget, and development of work plans. In 2007, source protection will continue to play an important role in TRCA's watershed management, and activities will increase in accordance with the expected proclamation of the *Clean Water Act* and regulations, which will kick off the requirement to establish the multi-stakeholder CTC Source Protection Committee.

watershed highlights

A watershed is an area of land that catches rain and snow which drains into a river, lake or other body of water.

waterfront

- Construction was initiated on the Tommy Thompson Park Master Plan Implementation project with the preparation for trail installation. Work will continue over the next two years and will include the installation of terrestrial and aquatic habitat features, park infra-structure and new pedestrian trails. Federal funding of \$8 million will flow through the Toronto Waterfront Revitalization Corporation (TWRC).
- Construction began in July on the Mimico Waterfront Linear Park project, funded by the TWRC. Implementation of this project is scheduled to be open to the public in July 2008 and will include new cobble beaches, a partially sheltered embayment, a back dune feature and a new section of the Waterfront Trail.
- In September, TRCA and the TWRC officially opened the Port Union Waterfront Park—Phase 1 to the public. Phase 1 spans from Port Union Road to Highland Creek and includes such park features as a new pedestrian bridge at Highland Creek, a series of cobble beaches

and headlands, a pedestrian node at the foot of Port Union Road and 1.8 kilometres of new Waterfront Trail. The second phase of the project will start in 2007 and will include the construction of a narrow shoreline of cobble beaches and headlands and a new two-kilometre section of the Waterfront Trail. Once completed, the Port Union Waterfront Park will provide continuous public access along the shores of Lake Ontario between Highland Creek and the Rouge River.

- The Western Beaches Watercourse Facility was completed on time and under budget, and ready for the International Dragon Boat Championships, held in August. Fish habitat improvements associated with the project will continue in 2007.

- With receipt of the *Framework for a Five-Year Implementation Plan for Pickering's Waterfront and Frenchman's Bay* and partnered with the City of Pickering to undertake a priority initiative to improve watershed health—*Stormwater Management Master Plan for Frenchman's Bay Watershed* was released.

- In 2005, both the EcoAction-funded Pickering Healthy Communities Project and the fourth year of the on-going Ontario Trillium Foundation grant for the Frenchman's Bay Watershed Rehabilitation Project (FBWRP) were implemented within Frenchman's Bay and Petticoat Creek watersheds. The community of Pickering took part in hands-on educational programs offered throughout the year including 25 group-oriented information sessions, seven habitat installation projects, eight native planting events and the delivery of the sixth volunteer monitoring season. Participation of over 2,500 volunteers in these programs accomplished the installation of 75 songbird boxes and one carp barrier, the distribution of 100 rain barrels and 30 Healthy Homes kits, planting over 5,000 native plants and monitoring of eight designated stations.

- Partnered with the Town of Ajax on priority initiatives as per approved Town of Ajax Waterfront Management Plan Update—Pickering Beach Waterfront Trail and linkage on west side of Carruther's Creek marsh, and waterfront naturalization.

- In the summer of 2006, TRCA expanded the shoreline management options for the Meadowcliffe Drive sector (Bellamy Ravine to Bluffer's Park)

and initiated the Class Environmental Assessment including establishment of a "community liaison committee."

- The first phase of shoreline protection was completed in front of the Guild Inn including appropriate fish habitat consistent with the Toronto Waterfront Aquatic Restoration Strategy.

- Toronto and Region Conservation commented on the International Joint Commission's work on the *Options for Managing Lake Ontario and the St. Lawrence River Water Levels and Flows*—final report by the International Lake Ontario-St. Lawrence Study Board—March 2006. Toronto and Region Conservation, along with Conservation Ontario, indicated strong support for Plan B+—Balanced Environmental, as consistent with "integrated watershed approaches and the continued preservation and restoration efforts of the environment to ensure the sustainability of the Great Lakes Basin."



- Toronto and Region Conservation commented to the Province of Ontario on the Canada-Ontario Agreement (COA) respecting the Great Lakes Basin Ecosystem, encouraging development of new Annexes which aim to conserve biological diversity, encourage the promotion of sustainable communities, better understand the impacts of climate changes on the Great Lakes, and determine strategies to adapt to a changing climate and protect the Great Lakes as a source of drinking water, and unique ecosystem of global significance.

- In 2006, TRCA concluded a five-year monitoring program that was conducted at the Arsenal Lands to ensure that the site does not pose a risk to human health or the environment, following remediation. Toronto and Region Conservation also continued with park planning for these lands, which resulted in the preparation of the Arsenal Lands/Marie Curtis Park West Master Plan Addendum. The Addendum includes the conceptual park plan that was presented to the public in 2005, as well as up-to-date site information, design guidelines and an overall park management strategy. The Addendum integrates the Arsenal Lands with the west side of Marie Curtis Park to form a regional waterfront park. Once development is complete, the park will offer recreational amenities, designed to compliment the park's unique natural and cultural heritage features. Given the park's proximity to the border of Mississauga and Toronto, the park will function as a "gateway park" that will service residents from both municipalities.

Etobicoke and Mimico creeks

- In partnership with Brampton, TRCA and the Etobicoke-Mimico Watersheds Coalition have embarked on a unique naturalization effort to restore valleylands on the Peel Village Golf Course. Restoration is taking the unique approach of planting native tree seeds collected along the Etobicoke Creek in a pit-and-mound restoration area. This project will continue through 2008.

- Heart Lake Secondary School in Brampton continues to partner with TRCA to naturalize their adjacent valleylands. In 2006, over 600 trees and shrubs covering over 1,000 square metres were planted, and a 4,000-square-metre wetland was created along the Etobicoke Creek as it passes the school. Over 300 students lent a hand in these restoration projects.

- Toronto and Region Conservation, the Valleywood Residents' Association and the Town of Caledon, partnered to complete both a spring and fall community planting, adding 2,127 square metres of riparian buffers in the headwaters of Etobicoke Creek. A long-term restoration plan has been completed for the Valleywood corridor and will continue over the forthcoming years.

- In partnership with the Greater Toronto Airports Authority (GTAA), TRCA completed an in-depth assessment of the terrestrial natural heritage system around the Lester B. Pearson International Airport, a fish management plan for the Etobicoke Creek and a review of the stormwater system for the entire Etobicoke Creek watershed. Toronto and Region Conservation will be working with the GTAA and its municipal partners to implement these recommendations starting in 2007.

- During 2006, Brampton undertook restoration work in Maitland Park, along the Etobicoke Creek. Attempting to improve water quality and quantity, Brampton took this channelized portion of the creek, removed concrete and gabion baskets from its sides, re-introduced its natural meander and complemented its riparian area with native trees and shrubs. Students from the University of Toronto joined TRCA in the fall of 2006 to help plant an additional 200 native trees and shrubs.



In 2006, the Etobicoke and Mimico creeks watersheds celebrated 60 years of conservation that began with the Etobicoke River Conservation Authority and looked to the future with the June release of the Etobicoke and Mimico creeks 2006 report card, *Turning over a new leaf: The Etobicoke and Mimico Creeks Watersheds Report Card 2006*, with a coalition of

community partners, including municipal governments. The state of these watersheds is an important measure of environmental health in the Greater Toronto Area (GTA). As a result of years of urbanization, they have become one of the most highly developed and degraded watersheds in the region. The report card demonstrates that progress has been made towards their restoration and identifies problems with water quality and water flows, natural cover and air quality—all of which have resulted from the absence of environmental priorities in urban development—and that further action is required to improve the area's health over the next 20 years.

Etobicoke and Mimico creeks watersheds 2006 accomplishments

	Caledon	Brampton	Peel	Etobicoke watershed	Mimico watershed	Toronto	Mississauga
events	2	12	16	16	14	6	10
attendance	27	12,249	14,341	13,476	1,520	655	2,065
plantings	235	5,982	7,047	6,717	1,695	1,365	830
riparian m ²	2,127	24,827	26,954	33,945	4,807	11,798	—
wetland m ²	—	9,619	9,619	9,619	—	—	—
bird boxes	7	85	92	122	35	65	—

**“Our problems
are man-made,
therefore they may
be solved by man.
No problem of human
destiny is beyond
human beings.”
—John F. Kennedy**

3. Positive eustasy (sea-level rise) may contaminate groundwater, affecting drinking water and agriculture in coastal zones. Increased evaporation will reduce the effectiveness of reservoirs. Increased extreme weather means more water falls on hardened ground unable to absorb it, leading to flash floods instead of a replenishment of soil moisture or groundwater levels. Higher temperatures will also increase the demand for water for the purposes of cooling and hydration.

Source: http://en.wikipedia.org/wiki/Economics_of_global_warming



The Humber Marshes

Humber River—A Canadian Heritage River

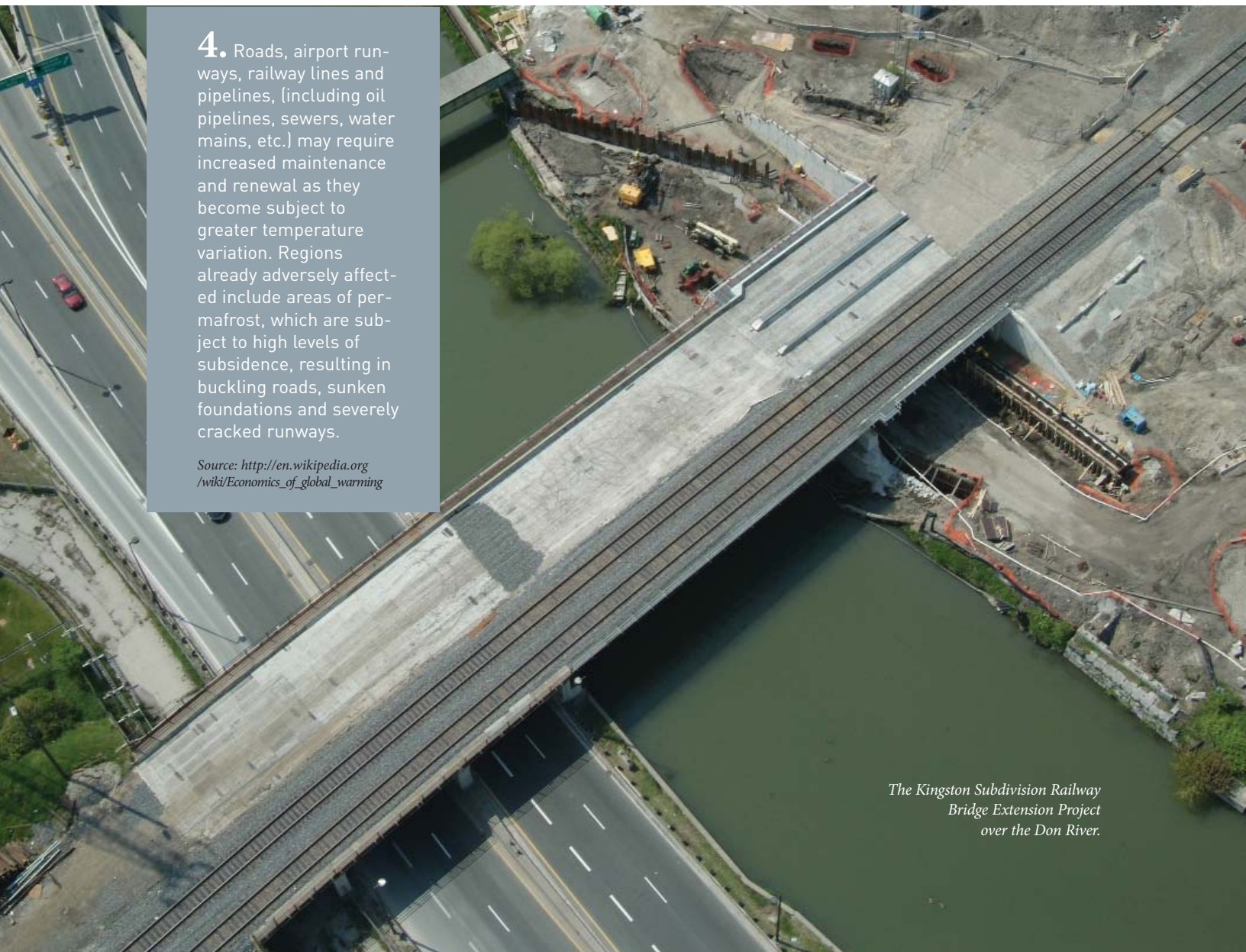
- Toronto and Region Conservation continued to make progress in the preparation of the Humber River watershed management plan to meet the requirements of the Oak Ridges Moraine Conservation Plan. All 11 current condition reports have been completed and are being reviewed by the project partners. The water budget, terrestrial system and aquatic system models have been completed. Surface and groundwater scenario modelling is in progress. This work will help understand how the watershed will respond under different land use and climate conditions so that appropriate planning occurs in the future.
- The second report card on the health of the Humber River watershed was completed. Twenty-six indicators were used to describe current efforts, existing conditions, trends, future targets and key actions necessary to improve watershed health.
- Twenty priority habitat restoration projects were implemented in the City of Toronto, and York and Peel regions. Work continued at multi-year projects including the Woodbridge Expansion Area (Vaughan), Eglinton Flats (Toronto), Eaton Hall Lake (King Township), Claireville Conservation Area (Brampton), Bolton Community Action Site (Caledon) and the Centreville Creek Conservation Priority Area 2 (Caledon). Key accomplishments include five hectares of wetland created, seven hectares of coniferous forest established, 18,000 deciduous trees and shrubs planted, and 4,650 aquatic plants installed. Community participation was a strong element in making these projects a success in local communities.
- Construction of the five-kilometre primary trail through the 428-hectare Kettle Lakes Nature Reserve in the Town of Richmond Hill was completed. This pedestrian trail will guide visitors through the sensitive natural corridor from Bathurst Street to Bayview Avenue. Attention is now turned to other implementation actions in the management plan including habitat restoration, heritage appreciation, site securement, interpretive and way-finding signage, and a variety of stewardship activities.

“I believe that mankind has all the necessary skills, resources and ingenuity to tackle climate change effectively. The question is not whether we can do this, but whether we will, and whether we will do so in time to affect the outcome.”
—Prince of Wales

- The Community Program for Stormwater Management continued to be offered to assist community groups with projects that help implement the City of Toronto Wet Weather Flow Management Master Plan. To date, 17 projects have been funded. The City of Toronto provided a \$250,000 annual grant to TRCA to undertake the program.
- The Humber Watershed Alliance, established in 1997, concluded another successful three-year term in October. The Alliance is one of TRCA's community-based watershed committees who assist with the protection, restoration and celebration of the Humber watershed. The membership includes municipal politicians, residents, and representatives from agencies, community groups, academic institutions and businesses from all parts of the watershed.

Don River

In 2006, TRCA worked closely with the Toronto Waterfront Revitalization Corporation (TWRC) to address the flood protection and naturalization of the mouth of the Don River, a priority project in waterfront revitalization. Highlights include:



4. Roads, airport runways, railway lines and pipelines, (including oil pipelines, sewers, water mains, etc.) may require increased maintenance and renewal as they become subject to greater temperature variation. Regions already adversely affected include areas of permafrost, which are subject to high levels of subsidence, resulting in buckling roads, sunken foundations and severely cracked runways.

Source: http://en.wikipedia.org/wiki/Economics_of_global_warming

*The Kingston Subdivision Railway
Bridge Extension Project
over the Don River.*

— Following the receipt of provincial approval for the Lower Don River West Remedial Flood Protection Project Class Environmental Assessment (EA) in 2005, great progress has occurred on two of the key flood control components in 2006:

1. Toronto and Region Conservation, in conjunction with Canadian National Railway, led the construction of the Kingston Subdivision Railway Bridge Extension Project over the Don River. By the end of 2006, the bridge construction was half completed.

2. Ontario Realty Corporation undertook the Flood Protection Landform component on behalf of, and in participation with, TRCA staff. All demolition activities were completed in 2006, in advance of the landform construction works that are anticipated to commence in 2007.

— In addition to the flood protection components of the Class EA, TRCA has proceeded with the construction of a pedestrian underpass at the Bala Sub-division which will connect the future West Don Lands Community with the Don Watershed Trail. By the end of 2006, this underpass was half completed. The underpass is anticipated to be completed in mid-2007 and will be opened in 2008 with the construction completion of the future Don River Park.

— Through extensive consultation with many stakeholders, TRCA received provincial approval of the Terms of Reference (ToR) for the Don Mouth Naturalization and Port Lands Flood Protection Project EA. Toronto and Region Conservation is proceeding with the development and evaluation of alternatives for the mouth of the Don and will be working closely with TWRC to integrate the results of their Lower Don Lands International Design Competition with the EA in early 2007.

— The Evergreen Foundation received a \$15 million grant from the federal government for the Don Valley Brick Works project. Construction is slated to commence in 2007. Approvals have been provided for the enhancement of the Don Valley Brick Works and TRCA has authorized the signing of a lease with the Evergreen Foundation for the site to become a destination of choice for residents and tourists.

— Published in the spring of 2007 was the Don progress report, *Forging a New Deal for the Don, 2006*—a celebration of notable accomplishments in the watershed since the publication of the original plan, *Forty Steps to a New Don*, in 1994, as well as outlining some of the challenges ahead for the Don River watershed including emerging concerns about global warming and air pollution, the threat of invasive species, and the ecological stress caused by development and population growth. These challenges will be addressed in the updated watershed management plan being developed for the Don River watershed.

Rouge River and Rouge Park

— In 2006, the Ontario government dedicated 200 hectares (500 acres) of significant natural land to Rouge Park—the Bob Hunter Memorial Park. An important addition to the Rouge Park family, the Bob Hunter Memorial Park supports the provincial Greenbelt Plan's special provisions for the Little Rouge Eco-logical Corridor section of Rouge Park, and preserves the last best forest in the Town of Markham and two cold-water streams that flow into Little Rouge Creek.



— The Rouge Park Award is presented to a member of the community who has made outstanding contributions to Rouge Park, and 2006 saw the award presented to Premier Dalton McGuinty. Premier McGuinty's leadership has resulted in a significant amount of new land added to Rouge Park, strong provincial support for our management plans and the addition of the Bob Hunter Memorial Park.

— In 2006, Rouge Park staff were invited to present two papers at the World Water Forum in Mexico City:

1. A program to encourage volunteer citizen participation in Rouge Park's natural heritage restoration, developing community connections with the park, and ensure citizen stewardship of the park's vision and objectives.
2. Rouge Park's ecological criteria approach to protecting water courses and their associated habitats in developing areas.

— Friends and supporters gathered in Rouge Park for the opening of a new public use area— Celebration Forest. This living memorial honours the lives of politicians, activists and researchers whose work to protect the natural heritage of the park deserved recognition.

— Rouge Park staff and members have been involved in several key planning exercises, scheduled to wrap-up by mid-2007 including the Rouge Watershed Task Force and Plan (Rouge Park Alliance and TRCA), Rouge Watershed Fishery Management Plan (Ministry of Natural Resources and TRCA) and the Bruce's Mill Master Plan (TRCA).

— With over 47 square kilometres of park land spanning five municipalities and numerous entrances, Rouge Park is making identification easier for visitors when they're in the park, working together with the Greenbelt Foundation to create and install signage along key provincial roadways.

— In 2006, the Rouge Park Alliance continued activities focused on building Rouge Park and creating park-like habitats. Attention was focused on restoration of forested and wetland habitats by volunteer community groups; providing critical forest habitats, including interior habitats for birds and other animals; and scientific studies into undesirable invasive species biology and biology of native species.

Highland Creek

The Highland Creek Environmental Stewardship Project continued to build capacity in this urban watershed, engaging a diverse community in a variety of restoration activities. In its second of three years of support from The Ontario Trillium Foundation, community partners are lead by staff at the Scarborough Arts Council to implement a suite of programs supported by the City of Toronto, Friends of Highland Creek, Centennial Community and Recreation Association and TRCA. Hands-on activities include native tree and shrub plantings, clean-up activities, environment days and combining art and the environment through the monarch program and mask project. More than 6,200 watershed residents have participated in events and over 750 have volunteered their time to improve the health of the Highland Creek watershed in 2006.

Duffins and Carruthers creeks

Duffins Creek

— Throughout the Duffins Creek watershed, TRCA staff have been actively working with local municipalities and trail groups: in Stouffville, local trail network around the reservoir links to the town-wide trail plan; in Uxbridge, which is striving to be the un-official trail capital of Ontario, there have been amazing advancements. Pickering has been working with TRCA, the Oak Ridges Trail Association, Ontario Realty Corporation and Dell Management to advance community-based trail planning and management for the Seaton Trail. In Ajax, the municipality is actively working with TRCA to advance its community-wide trail network, linking communities with the watershed and waterfront

— The province commenced development of a Natural Heritage System Management Plan for the greenspace lands identified in the OPDA (*Ontario Provincial Development Act*) plan for Seaton. Urban planning is underway for this site, which will showcase sustainability principles and modern environmental designs for subdivisions, roads, trails and stormwater management.

5. Some of the most immediate effects of recent climate change are becoming apparent through impacts on biodiversity. The life cycles of many wild plants and animals are closely linked to the passing of the seasons; climatic changes can lead to interdependent pairs of species. In principle, this could lead to extinctions or changes in the distribution and abundance of species.

Source: Wikipedia, Climate Change: Climate Change and biodiversity



— The Town of Ajax continues to advance its community greening projects to enhance the waterfront, Duffins Creek and Carruthers Creek marshes and watersheds.

— Though not a TRCA accomplishment, but worthy of mention, York Region has decommissioned the Stouffville Creek Water Pollution Control Plant for the first time in over 30 years. West Duffins is no longer used to assimilate sewage from the Town of Stouffville.

— Transport Canada and TRCA have been working together to restore stream bank vegetation on the federal greenspace lands in the Duffins Creek watershed.

— Toronto and Region Conservation, in partnership with the Oak Ridges Moraine Foundation, the Township of Uxbridge and local residents, have been advancing private lands stewardship on the Oak Ridges Moraine, planting trees and constructing wetlands.

— Durham Conservation Association and its sister organization, the Green Door Alliance, continue to advance locally based conservation in the Township of Uxbridge and north Pickering. This group has generously donated money, helped to secure significant properties, been a watershed advocate for provincially / federally-owned land in the Duffins, and applied and successfully secured grants for sustainable trails and habitat improvements.

Carruthers Creek

Being small and tucked into the eastern corner of TRCA's jurisdiction, it is understood why the Carruthers Creek watershed is one of the least recognized watersheds. Lacking in a public land base and undergoing rapid urbanization, this watershed can be considered "at risk". The above list of activities and accomplishments for the Duffins Creek illustrates how larger watersheds garner attention and community support.

6. On a global scale, the number of Category 4 and 5 hurricanes has almost doubled in the last 30 years.

Source: An Inconvenient Truth >The Science,
www.paramountpictures.co.uk/aninconvenient-truth/thescience/



- The Town of Ajax has been developing trails along the waterfront and Carruthers Marsh, and has been working with TRCA staff on some Greening Ajax tree plantings and stream naturalization work.
- Deer Creek Golf Course has been updating its Ministry of Environment permit to take water and, through this process, has constructed a low-flow stream channel by-pass to promote fish movements. They are considering becoming certified as part of the Audubon Golf Course program. This golf course currently employs Integrated Pest Management practices and other environmentally sustainable practices.

watershed planning and water management

The Rouge Watershed Task Force completed their update of the Rouge Watershed Plan in November of 2006. Work continued at a hectic pace to complete the Humber Watershed Plan, as well as the supporting technical documents for both the Rouge and the Humber. Both plans are based on advanced modelling and integration of surface water quality and quantity, groundwater, and aquatic and terrestrial natural heritage. For the first time, we have evaluated the effects of applying more sustainable community design parameters for water management into new and older developed areas and it shows us how important the application of these measures will be for future protection of rivers from erosion and flood flows. We have also evaluated a couple of climate change scenarios for this effect on the watersheds. The outcome of the plans suggest that we can develop and protect or mitigate the effects of this development on water and natural heritage—providing the foundation for sustainable communities.

Toronto and Region Conservation, along with eight other conservation authorities in the Greater Golden Horseshoe and the Department of Fisheries and Oceans joined forces to update sediment and erosion control guidelines that were woefully dated. A new Erosion and Sediment Control Guideline for Urban Construction was released in December of 2006 and provides for an improved and integrated process of design and control during the construction process. New techniques are identified and monitoring processes outlined to ensure effective response to changing construction and environmental conditions.

The current TRCA watershed planning process examines various components of ecological and physical processes, which are critical to watershed health and function. From an adaptation perspective, climate change is an additional stressor on each of these systems and will be integrated into the existing watershed planning process. A review of existing management strategies and watershed policies will be conducted to evaluate and document how these are affected by climate change stresses and what actions, if any (research, data, policy direction), need to be implemented to deal with climate-related risks.

flood management

The updating of floodplain mapping continued in 2006, with a further 137 sheets completed of the 517 maps for our jurisdiction broken down as follows:

- 35 mapsheets for the Don River south of Steeles Avenue
- 11 mapsheets for Petticoat Creek
- 91 mapsheets for the Rouge River

The remaining floodline mapping updates will be finalized in 2007.

In 2006, a number of significant goals were realized:

- A pilot project was initiated in the Don River watershed for a real-time, web-based stream gauging system that will greatly improve the flood warning system's response time and reliability. Additional gauges, both flow and precipitation, will be installed to provide coverage over the entire jurisdiction once the pilot project is assessed.
- A maintenance database was developed for TRCA-owned flood control structures that will facilitate the inspection process and establish priorities for maintenance works.
- Documentation for the August 19, 2005 storm was completed.
- Safety improvements and maintenance were undertaken for G. Ross Lord Dam, Claireville Dam and Stouffville Dam. Dam Operations Manual updates at G. Ross Lord Dam were initiated.
- An Emergency Operations Centre was constructed at TRCA's head office and integrated with the overall head office back-up power system to ensure functionality during an emergency.
- During 2006, the flood warning system operated 24/7/365, with a total of 27 messages being issued. The breakdown on message types is as follows: 19 High Water Safety Bulletins, eight Flood Advisories, zero Flood Warnings.
- The number of staff involved in the program was expanded to include the watershed engineers and the ongoing training program was expanded to reflect the increased number of staff. This will improve our overall operational capabilities, as well as improve the ability of TRCA to provide business continuity within this critical program area.

watershed monitoring and reporting

watershed monitoring program

Watershed monitoring data provides the platform for many of the regular reporting tools used by TRCA. Without current data on the various watershed health indicators, these reports could not be created nor updated in an effective manner.

The same data provides the foundation for the "science" or "knowledge" base that facilitates the development of decision-making tools and policies that can be used to address **key regional environmental issues**, such as water quality, watershed health and urbanization. An example is the recently approved Terrestrial Natural Heritage Strategy.

Some of the data collected to-date shows the effects of urbanization on aquatic and terrestrial natural heritage systems—specifically a trend towards a decline in water quality, fish communities and the quality of natural heritage cover and species in areas of increasing urban landuse. However, TRCA is confident that changes can be tracked through our monitoring efforts and, therefore, follow the progress of improvements or revisions made.

As part of the Remedial Action Plan (RAP) progress report for the Toronto Area of Concern (AOC), TRCA undertook an assessment of fish tumors finding that incidents and frequency of tumors were down in TRCA's jurisdiction over previous findings, and lower than most other Areas of Concern. Toronto and Region Conservation staff presented their findings at a conference in Columbus, Ohio.

The use of standardized protocols has made our data robust and valuable for sharing with our partners and for application on other scales (e.g., site-level, Oak Ridges Moraine, etc.). This further ensures future benefit of the data for applications beyond our current reporting and assessment needs.

2006 monitoring summary

number of sites	type of monitoring
9	baseflow
19	stream gauges
58	fish
145	aquatic invertebrates (benthos)
22	groundwater wells
90	stream temperature
36	water quality
48	west Nile virus
1,500 hectares	breeding birds, plants and amphibians
54 sites	volunteer terrestrial monitoring program
52	fluvial geomorphology
31	precipitation
10	snow

7. At least 279 species of plants and animals are already responding to global warming, moving closer to the poles. And more than one million species worldwide could be driven to extinction by 2050.

Source: *An Inconvenient Truth>The Science*, www.paramountpictures.co.uk/aninconvenienttruth/thescience



“[W]hen we look at the graphs of rising ocean temperatures, rising carbon dioxide in the atmosphere and so on, we know that they are climbing far more steeply than can be accounted for by the natural oscillation of the weather... What people (must) do is to change their behaviour and their attitudes...

**If we do care about
our grandchildren,
then we have to do
something and we
have to demand that
our governments
do something.”**
— David Attenborough

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8. Anthropogenic factors are acts by humans that change the environment and influence climate. Various theories of human-induced climate change have been debated for many years. The biggest factor of present concern is the increase in CO₂ levels due to emissions from fossil fuel combustion, followed by aerosols (particulate matter in the atmosphere), which exerts a cooling effect. Other factors, including land use, ozone depletion, animal agriculture and deforestation also impact climate.

Source: Wikipedia, Climate Change: Human influences on climate change





“The last word in ignorance is the man who says of an animal or plant ‘what good is it?’ If the land mechanism as a whole is good, then every part is good, whether we understand it or not ...to keep every cog and wheel is the first precaution of intelligent tinkering.”
—Aldo Leopold

regional biodiversity— inspiration for a greener, healthier Toronto region

2006 highlights

- Toronto and Region Conservation acquired over 700 acres of greenspace in 2006.
- 2006 saw the largest single donation in TRCA's history—\$1.4 million, from the Wilder family.
- Toronto and Region Conservation entered into a management agreement with the Government of Canada regarding Transport Canada greenspace lands in the Township of Uxbridge.
- The Heart Lake Conservation Area (HLCA) Master Plan was approved by TRCA in June 2006 and endorsed by the City of Brampton and the Etobicoke-Mimico Watersheds Coalition.
- Planted over 200,000 native trees, shrubs and aquatic/herbaceous plants in 2006 within TRCA's watersheds.

conservation lands

Toronto and Region Conservation acquired over 700 acres of green space in 2006. Key to these successful acquisitions was the private/public funding partnerships created to make the purchases a reality. Following are descriptions of three significant properties TRCA acquired in 2006.

the Wilder forest and wildlife area

A beautiful 249-acre gem located on the Oak Ridges Moraine in the Township of Uxbridge was acquired by TRCA from Judith and William Wilder. This acquisition included the donation by the Wilders of 17 acres of land. Also assisting with funding for this purchase was the Oak Ridges Moraine Foundation, the City of Toronto and Durham Region. This significant property is located in the headwaters of the Duffins Creek. With Areas of Natural and Scientific Interest (ANSI) and a portion of the provincially significant Glen Major Wetlands Complex, the property is designated as Natural Core Area under the Oak Ridges Moraine Conservation Plan. The property is almost entirely forested, containing Sugar Maple, beech, oak, White Pine, Red Pine, Jack Pine and white spruce. Mr. and Mrs. Wilder and two of their companies also donated \$1 million in stock and money to the Conservation Foundation of Greater Toronto for the purchase of land. The total value of the land and funds donated by the Wilders is \$1.4 million—**the largest single donation ever received by TRCA.**

the Slokker Canada lands

The Slokker Canada lands are located in the Nobleton area of the Township of King. It is a particularly unique 172.5-acre property loaded with important environmental features, including provincially significant wetlands known to area residents as the Black Duck Wetland Complex, through which also run four tributaries to the Humber River. A broad funding partnership was created to make the purchase of this \$2.9 million property a reality. Contributions came from the City of Toronto, with \$1 million from their source Land Acquisition for Source Water Protection Reserve; York Region contributed \$1 million toward the property as part of its Greening Strategy; Slokker Canada Inc. reduced the sale price by \$760,000; The Township of King (where the property is situated) contributed \$25,000; the Conservation Foundation of Greater Toronto, \$37,000; the Oak Ridges Moraine Land Trust (ORMLT), \$25,000; and private donations of \$3,000. Both the Conservation Foundation and the ORMLT were able to use funds raised from the Charles Sauriol Environmental Dinner toward this purchase. Toronto and Region Conservation will hold title, while the ORMLT will hold an environmental easement on the property and York Region will manage the property as York Regional Forest.

Jefferson forest

The acquisition of 900 Stouffville Road property (25 acres of the Jefferson Forest), in the Town of Richmond Hill, is an example of another exciting partnership. The purchase was made possible through funding donations from York Region, the Town of Richmond Hill, the Oak Ridges Moraine Foundation, the City of Toronto and the Conservation Foundation of Greater Toronto, totaling \$994,000. The property, located in the head waters of the Rouge River, is almost entirely forested and is part of an Areas of Natural and Scientific Interest.

- The Heart Lake Conservation Area (HLCA) Master Plan was approved by TRCA in June 2006. The plan envisions HLCA as a significant conservation park that forms a key environmental, cultural and social component of an established urban community in The Living City. The park, which will be used for nature-based recreation and as a “living” classroom, will be managed with a stewardship approach that allows natural communities to prosper. The master plan was endorsed by the City of Brampton and the Etobicoke-Mimico Watersheds Coalition. This culminates three years of hard work by the 23 members of the HLCA Master Plan Advisory Committee.
- Toronto and Region Conservation initiated the development of a trail plan for the Palgrave Forest and Wildlife Area in the Town of Caledon. A 15-member advisory committee is assisting TRCA with the development of this plan.
- In partnership with Durham Conservation Association, TRCA received a \$70,000 grant from The Ontario Trillium Foundation for trails at Glen Major Forest and Walker Woods in the Township of Uxbridge. This money was directed at the development of TRCA's first sustainable trail (two kilometres in length), a new trail head and parking area off Brock Road, installation of three interpretive signs and construction of 50 feet of boardwalks.
- Toronto and Region Conservation partnered with the Oak Ridges Trail Association to improve trail access in the Secord Forest and Wildlife Area in the Township of Uxbridge. The partnership resulted in a trail head sign and a parking area that provides improved public access to the Oak Ridges Trail. In addition, a long-term goal was achieved when TRCA partnered with the Trails for All Ontarians Collaborative to design and install TRCA's first universally accessible trail at the Secord Forest and Wildlife Area. This new trail is approximately one-kilometre long and provides universal access from the trail head to the Secord pond.

- Toronto and Region Conservation entered into a management agreement with the Government of Canada regarding Transport Canada greenspace lands in the Township of Uxbridge. Together with the Oak Ridges Trail Association and Transport Canada partners, TRCA installed a trail head that provides public access and links to the Oak Ridges Trail, the TRCA-owned Goodwood property and Transport Canada greenspace lands that previously had no formalized public access.
- Toronto and Region Conservation initiated the greening of its head office parking lot and office entrance. Phase one included making the entrance wheelchair-accessible, incorporating patterned concrete as a drop off and sidewalk, and installing a bench and two bicycle racks. There is now parking space for up to 14 bicycles.

Toronto and Region Conservation land ownership by geographic feature

10,709 acres within the Oak Ridges Moraine

1,232 acres within the Niagara Escarpment

3,373 acres along the Lake Ontario shoreline

24,292 acres within watershed valley corridors

39,606 acres total secured



**“If the bee
disappeared off the
surface of the globe,
then man would only
have four years of life
left. No more bees,
no more pollination,
no more plants,
no more animals,
no more man.”
—Albert Einstein**

natural heritage

terrestrial

After many years in development, the documentation of the science and the modelling tools for the Terrestrial Natural Heritage System Strategy (TNHSS) is completed, with approval by the Authority in January of 2007. Toronto and Region Conservation staff worked diligently with stakeholders to resolve outstanding concerns and ensure integration with the growth planning process that our partners are embarking on. The tools developed through this strategy are leading-edge and for the first time give us the ability to predict effects to species diversity with land use change—through development or naturalization efforts. This is a tool that can form the basis for a Natural Heritage System, a requirement of future growth plans being undertaken by our municipal partners.

Inventory work continued on TRCA and private lands to identify species of flora and fauna present, and map their locations to contribute to our growing database of natural heritage information used for a variety of purposes including land development and environmental assessments. In 2006, we inventoried 1,500 hectares of natural cover including forests, wetlands and meadows. Of particular interest were some of the following findings:

- Virginia Rail were breeding at one of the Centennial Park wetlands—a reinstatement of the species as a breeding bird for the Mimico Creek watershed.
- The Eastern Screech-owls on Mimico Creek, just north of The Queensway, successfully fledged young this summer.
- Wood Frogs were heard singing in full chorus at the Rowntree Mills site in the City of Toronto this past spring. This is the only known location for this species in the City of Toronto as they require good quality wetlands for breeding.
- Long-eared Owls successfully bred at the Oak Ridges Moraine Corridor Park in Richmond Hill (only the third confirmed breeding location of this species in TRCA's jurisdiction documented by TRCA staff).



- The Taylor Creek fen in the Don River watershed was found to be still supporting Hooded Ladies' Tresses (*Spiranthes romanzoffiana*), which is an orchid species that is not known to occur anywhere else in TRCA's jurisdiction by staff.
- Five native orchid species were found on the Tommy Thompson Park/Leslie Street Spit. To have this kind of diversity of orchids in an urban area is quite significant as they are very sensitive to a variety of factors such as collection and trampling.
- Toronto and Region Conservation crews continued to aid the Canadian Food Inspection Agency in their monitoring for the Asian Long-horned Beetle (ALHB) and, fortunately, survey teams have not found any new occurrences within the regulated area in 2006, suggesting that the mitigation measures were successful.

The tools and science of the TNHSS were invaluable as TRCA worked with our municipal partners at Ontario Municipal Board (OMB) hearings to address issues of natural heritage protection. Favourable decisions were rendered for protection of the natural environment by OMB chairs based on convincing data and cases to be made for the larger scale effects or what appear to be minor changes in natural cover, or an adjacent change in land use. These hearings included 56 Grovetree in Toronto, North Leslie in Richmond Hill and Camp Villas in Caledon.

aquatic

The Fisheries Management Plan (FMP) for Duffins Creek and Carruthers Creek was launched by TRCA, the Ontario Ministry of Natural Resources (OMNR) and Fisheries and Oceans Canada (DFO) in January 2006, following extensive consultations with local anglers and other members of the public. The plan charts a program to rehabilitate degraded fish habitat and return Atlantic Salmon to the Duffins Creek.

The plan came closer to reality as Duffins Creek was one of three tributaries selected by the Ontario Ministry of Natural Resources to be part of what is considered the most significant freshwater restoration project in North America. The selection process was based on over 15 years of research which identified Duffins Creek as the healthiest watershed in the Toronto region with suitable aquatic habitat and it was historically a prominent Atlantic Salmon stream. Approximately 350,000 Atlantic Salmon fry and fingerlings were released in both the spring and fall of 2006.

Our results from an enhanced stream temperature survey undertaken by TRCA in Duffins Creek verified that stocking sites for Atlantic Salmon were suitable for over-wintering fry and fingerlings and provided important refinements to where future egg survival would be maximized.

The completion of the Humber River Fisheries Management Plan in May 2006 marks this as the second watershed to benefit from the collective efforts of TRCA, OMNR, DFO and public consultation. This plan lays out the implementation actions required over 10 years to achieve the goals of a healthier aquatic ecosystem, with the mitigation of several instream barriers to fish passage as the first step to be completed.

The final results of the Lower Etobicoke Creek Barrier Survey were produced in March 2006 with 25 per cent of the watershed inventoried for structures that are stopping the movement of riverine fish species and potential migration of salmon and trout species from Lake Ontario to the relatively healthy habitats in the headwaters. Three barriers were identified for priority removal within the watershed. At present, the Etobicoke Creek system is free of the invasive species Round Goby and Sea Lamprey.

In keeping with TRCA's commitment to managing for invasive species, the weir at the bottom of Etobicoke Creek was recommended for mitigation to allow only jumping fish species to pass, such as salmon.



Results from our inventory work in support of fish management plans and watershed plans continue to document the decline in species that are considered sensitive to development. Rainbow Darter have not been located in the Don River watershed since 1984 and populations of Redside Dace, a minnow common to many of our small streams which is federally and provincially recognized as a species at risk, continue to decline as development moves into the headwaters of our watersheds. In contrast, a new invasive species, Round Goby, was detected for the first time in the lower main Rouge River in September 2006.

However, as some of the healthiest populations of Redside Dace are still found within the Rouge River watershed, the protection of this habitat is featured prominently in the nearly completed and updated version of the Rouge River FMP. This FMP is setting the bar even higher for aquatic habitat protection through the application of cutting-edge science and predictive models that increase our understanding around the relationships between a changing landscape and the health of our rivers and the fish communities they support.

“The great French Marshall Lyautey once asked his gardener to plant a tree. The gardener objected that the tree was slow growing and would not reach maturity for 100 years. The Marshall replied, ‘In that case, there is no time to lose; plant it this afternoon!’”
—John F. Kennedy

reforestation and regeneration

Tree and shrub planting (all projects) 2006

Planting goals	Private land	TRCA land	Municipal land	Federal/provincial lands	Total planted (*)
Reforestation	27,415	33,905	3,480	250	65,050
Conservation Services	20,401	90,862	26,733	2,935	140,931
Total	47,816	124,767	30,213	3,185	205,981

(*) Includes all projects utilizing TRCA nursery plants

Planting by watershed 2006

Watershed	Shrubs	Trees	Bioengineering / aquatics	Reforestation seedlings	Total planted
Etobicoke / Mimico	7,282	2,696	6,292	500	16,770
Humber	24,844	12,035	11,513	53,580	101,972
Don / Highland	5,728	2,023	10,579	2,325	20,655
Rouge	9,105	3,572	2,951	2,070	17,698
Duffins	9,608	2,476	20	5,100	17,204
Petticoat / Frenchman's	1,190	555	0	0	1,745
Waterfront	3,949	868	20,181	0	24,998
totals	61,706	24,225	51,536	63,575	201,042

— Planted 199,025 native trees, shrubs and aquatic/herbaceous plants in 2006 within TRCA's watersheds.

— An additional 6,956 plants were supplied to other Greater Toronto Area conservation authorities and partnering NGOs for planting within their respective watersheds.

Toronto and Region Conservation's Indigenous Plant Propagation Nursery, located at Boyd North, has recently renewed its Permit to Take Water (PTTW) from the Ontario Ministry of Environment (MOE). As a result of changes in legislation and MOE PTTW requirements, TRCA will no longer draw surface water from the East Humber River but will now draw a reduced amount of water from an approved groundwater well and irrigation holding pond source. Toronto and Region Conservation's nursery has implemented a series of operational changes directed to substantially reduce its 2007 PTTW provision by more than 500,000 litres per day. Groundwater studies and pump tests have shown that the new groundwater source well will not impact the surface water system in this reach. The elimination of this surface water intake will benefit the aquatic habitat in the downstream reaches of the East Humber River subwatershed.

The Environmental Engineering Projects group is working towards utilizing greener, more innovative designs in their larger scale erosion control works projects; mimicking natural channel formation and sediment transportation models while building failsafe mechanisms into the designs in anticipation of more frequent and significant storm events like the August 19, 2005 storm, and the other affects of climate change. In the smaller-scale projects, softer bioengineering techniques are replacing the traditional hard-stone application approach.

In 2006, staff continued to work on emergency works related to the damage caused by the August storm, including the completion of the repairs at Birkdale Ravine and the commencement of the restoration of the Highland Creek channel in the vicinity of Morningside bridge.



The Environmental Engineering Projects group was also busy with seven major Class Environmental Assessments for Flood and Erosion Control projects. Additional projects undertaken include:


- Three geotechnical and risk assessment studies.
- Monitoring of over 300 erosion control structures and sites within the City of Toronto and the regional municipalities of Peel and York.
- Crest recession measurements for the whole of Scarborough Bluffs.
- Monitoring of all Lake Ontario shoreline protection structures.
- A special monitoring program for the City of Toronto to document all water-related infrastructure (sewer crossings, outfalls, bridges, etc.) within Mimico Creek, Newtonbrook Creek, Taylor Creek and a portion of the East Don River within the City of Toronto.
- This group also coordinated the application and receipt of over \$500,000 in Water Erosion Control Infrastructure (WECI) funding from the Ministry of Natural Resources for the maintenance of failing flood and erosion control structures.

“We can’t solve problems by using the same kind of thinking we used when we created them.”
—Albert Einstein

In 2007 the Environmental Engineering Projects group will, in conjunction with our funding partners, continue to focus on providing the same level of excellence in our monitoring, design and construction works, while incorporating innovative new approaches and consideration for the changing climate to their projects. It is one of the key initiatives of the group to learn from the past and to build towards the future.

planning and development

In 2006, TRCA’s Planning and Development (P&D) staff assisted ecology and watershed planning staff to finalize the policy recommendations of the draft Terrestrial Natural Heritage System Strategy and the recommendations for the draft Rouge Watershed Plan. This work, and more recent analysis for the draft Humber and Don watersheds plans, revealed the complex inter-relationships between watershed health and urban development, and confirmed the need to build more sustainable communities consistent with The Living City vision.



9. Prior to widespread fossil fuel use, humanity’s largest impact on local climate is likely to have resulted from land use. Irrigation, deforestation, and agriculture fundamentally change the environment. For example, they change the amount of water going into and out of a given location.

Source: Wikipedia, Climate Change: Human Influences on climate change

**“First I worry about
climate change.
It’s the only thing I
believe has the power
to fundamentally end
the march of civiliza-
tion as we know it,
and make a lot of the
other efforts that
we’re making irrele-
vant and impossible.”**
—Bill Clinton

The objectives of TRCA’s The Living City initiative are compatible with the province’s vision for the entire Greater Golden Horseshoe (GGH), which expounds the importance of a healthy natural environment, productive urban and rural areas, community well-being, and an integrated transportation network supported by a diverse, more compact urban form. In June 2006, the Ontario Ministry of Public Infrastructure and Renewal issued the final version of the Growth Plan for the GGH. Along with the other GGH municipalities, TRCA’s municipal partners must amend their official plans to conform to the Growth Plan within three years. Toronto and Region Conservation’s watershed planning work advances the science that supports growth planning, forming a foundation that helps our municipal partners plan for more sustainable urban development.

Planning and Development's advisory role in municipal plan review exercises, expert witness testimony, and Oak Ridges Moraine and Rouge Park projects resulted in a positive contribution to the health of our watersheds in 2006:

- **Pine Valley Drive link**—Minister's order removed the Pine Valley Drive link road option through Boyd Conservation Area in Vaughan.
- **56 Grovetree Road Ontario Municipal Board (OMB) decision**—Appeal dismissed for subdivision proposed within the Humber River Valley in Toronto.
- **Block 39 (Vaughan) and Slokker (King) subdivisions**—Municipalities, developers and TRCA worked together through a charette process, to make energy-saving designs a condition of approval.
- **Seaton**—The province approved the plan for this urban and agricultural community with a substantial and integrated natural heritage system defined by TRCA and the Ministry of Natural Resources, in Pickering.
- **Markham Centre**—In this new community, which includes a rehabilitated, naturalized stream corridor, TRCA continued to successfully promote the integration of innovative stormwater management, environmental monitoring and other best management practices.
- **Mayfield West Secondary Plan**—TRCA defined a major natural heritage system, forming the core of a new community in Caledon.
- **Highway 404 Employment Lands Working Group**—Multi-agency, multi-disciplinary working group created by the Town of Richmond Hill to streamline the review of applications in the Highway 404 corridor, inclusive of key ecological negotiations.
- **North Leslie OMB decision**—Approved block plan in the Town of Richmond Hill with a natural heritage system defined by TRCA and the municipality's consultants, which comprised approximately 30 per cent of the land under review.
- **Camp Villas OMB decision**—Appeal dismissed for development within a woodlot and valley corridor of the Humber River in Caledon.
- **Brampton Official Plan update**—Embraced a "sustainable city concept" of compact, transit-supportive communities that are less resource-dependent and sensitive to the environment.
- **Little Rouge Creek Corridor Management Plan**—A state-of-the-art management plan prepared by a steering committee of Rouge Alliance partners for 675 hectares located on the Little Rouge River in Markham.
- **Conservation Authorities Moraine Coalition**—A record year for stewardship and land securement, as 1,850 acres of environmentally sensitive lands were secured, compared to 1,842 acres in the previous four years combined.

Overall, P&D reviewed 722 *Planning Act* applications and approximately 114 Environmental Assessments in 2006. Permits under our Regulation numbered 770 and violations issued totalled 55.




Planning and Development staff also effectively used the results of TRCA's scientific work in one of its own major projects in 2006: implementation of the conservation authorities' Generic Regulation. The P&D section spearheaded the Generic Regulation conformity exercise to completion by May 2006, when the Minister of Natural Resources approved Ontario Regulation 166/06 (Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation). As part of this process, flood plain mapping updates and other hazard land mapping was completed for the entire jurisdiction, which included extensive consultation with our municipal partners and the public throughout the process.

In 2007, P&D will continue to use our growing base of scientific knowledge in implementing Ontario Regulation 166/06 policies, TRCA Watershed Plan policies and the Terrestrial Natural Heritage Strategy, through municipal official plans and an update to TRCA's Valley and Stream Corridor Management Program.

In 2006, planning applications processed, 722; development permit applications received and processed, 770; development permit applications issued, 677; solicitor/realtor inquiries, 1,218; property clearances, 45; concept development inquiries, 276; violations issued, 55; development permit renewals, 133; active OMB hearings/negotiations, 16.

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11. It is known that carbon dioxide levels are substantially higher now than at any time in the last 800,000 years. Along with rising methane levels, these changes are anticipated to cause an increase of 1.4–5.6 °C between 1990 and 2100.

*Source: Wikipedia, Climate Change:
Human Influences on climate change*

**“For in the final
analysis, our most
basic common link, is
that we all inhabit this
small planet, we all
breathe the same air,
we all cherish our
children’s futures and
we are all mortal.”**
—John F. Kennedy

sustainable communities— our environment comes alive

2006 highlights

- The TRCA Archetype Sustainable House Project national competition conducted in partnership with the Design Exchange.
- “Birth” of The Living City Campus (Kortright Centre for Conservation)—designed to be a facility that inspires people from all over the world to live more sustainably.
- Construction commenced on TRCA’s new Restoration Services Building, designed for TRCA with a LEED® Platinum level certification (pending) that, when completed, will be one of the “greenest” buildings in the country.
- The Block 39 project located in the City of Vaughan is currently Ontario’s largest Energy Star® community under development. Led by TRCA, the project explores what is possible in new community development.
- Minister’s order removed the Pine Valley Drive link road option through Boyd Conservation Area in Vaughan.

The Living City

The Greater Toronto Area (GTA) is growing rapidly. It faces drastic challenges to manage growth, maintain a high quality of life and to simultaneously restore biological diversity and water resources to new levels. The Living City is an attainable vision of nature in the city where human systems (belief systems, governance systems, built systems and economic systems) mimic and assimilate nature’s processes to achieve resource efficiency, well-being and prosperity. Cities are part of, not separate from nature.

Toronto and Region Conservation’s ability to realize this vision has necessary global implications. We hold within our borders approximately 20 per cent of the world’s fresh water, including seven per cent of the world’s fresh renewable water, a resource facing impending pressures and shortages in this century.

The future of the planet will be determined in cities. By 2030, 61 per cent of the world’s population will be living in cities. The Greater Toronto Area (GTA) is the largest urban area in Canada. Increasing the livability of the GTA by conserving freshwater and biological resources for future generations is imperative and TRCA’s commitment.

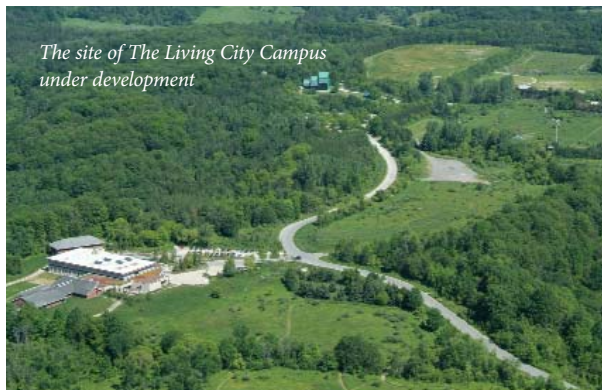
With this new vision for The Living City, TRCA embarked on a new era of conservation, with a refocused effort to harness our strengths and experience and to address climate change as we work to achieve our mission. We recognize the importance of learning from the past to envision a sustainable future.



The Living City Campus

Research and Biodiversity

- 1 Pine Valley Drive Entrance
- 2 Sugar Bush Drive
- 3 Sustainable Technologies Research Collaborative
- 4 Earth Rangers
- 5 Butterfly Garden
- 6 Hummingbird Garden
- 7 Peregrine Centre
- 8 Biodiversity Trail Learning and Demonstration Sites
- 9 Bee House
- 10 Insects
- 11 Amphibians
- 12 Bat Cave
- 13 Primary Visitor Orientation Booth



Core Campus—Sustainable Living

- 15 Wind Energy
- 16 Solar Electricity
- 17 Solar Photovoltaic
- 18 Hydro
- 19 The Meeting Place
- 20 The Kortright Centre
- 21 Archetype Sustainable Houses
- 22 Watershed Activity Area
- 23 Interpretive / Leadership Canopy Walk
- 24 Forest Cathedral
- 25 Sugar Shack
- 26 Secondary Visitor Information Booth
- 27 Sustainable Demonstration Area
- 28 Main Green
- 29 The Commons—Amphitheatre
- 30 Biomass / Biofuels

Northern Region—Urban Agriculture and Wetlands

- 31 Urban Agriculture
- 32 Service Yard
- 33 The Mounds
- 34 Wetlands
- 35 Farm Animals



“Our house is burning down and we are blind to it. The Earth and humankind is in danger and we are all responsible. It is time to open our eyes. Alarms are sounding across all continents. We cannot say we did not know! Climate warming is still reversible. Heavy

would be the responsibility of those who refuse to fight it.”
—French President
Jacques Chirac

Toronto and Region Conservation is leading and participating in several sustainability initiatives aimed at adapting to and mitigating against climate change.

— The Living City Campus (formerly the Kortright Centre for Conservation) is designed to be a facility that inspires people from all over the world to live more sustainably. From renewable energy to green buildings to new technologies and sustainable transportation, visitors will experience the latest in green living, inspiring change in how we live, work and play today for a healthier tomorrow. The Living City Campus grows out of TRCA's vision for healthy urban environments and The Living City.

— The TRCA Archetype Sustainable House Project began with a national competition conducted in partnership with the Design Exchange. The intent of the competition was to engage architects, engineers and graduate students from across Canada to design a mass production green home for new community development. The winning team/design, *Building Blocks*, chosen on June 21, 2006, was selected from 17 entries by a blue ribbon panel of judges. A comprehensive report was provided with each design submission, with final design drawings and specifications to be generated by the winning team prior to construction.

The winning design will be built at The Living City Campus, breaking ground in fall 2007. The Archetype Sustainable House Project will serve as the primary energy conservation education facility for workshop participants and as a model to help monitor and verify the effectiveness of materials, systems and technologies.

— Construction of the new Restoration Services Centre commenced in 2006. This facility addresses long-standing deficiencies related to the administration and operation of TRCA's Indigenous Plant Propagation Program and the staging and implementation of resource management projects. Completed in spring 2007, it also provides much needed office space, housing staff from the Parks and Culture and Restoration Services divisions. The facility is awaiting the final Leadership in Energy and Environmental Design (LEED) certification—LEED Platinum is expected. If a Platinum rating is achieved, TRCA's first LEED building will be only the second building in Canada to receive this rating.

One feature of the development is an on-site stormwater management system, including the enlargement of an existing retention pond. The reservoir and on-site well has allowed the nursery irrigation operation for the first time to be off-line in terms of taking water from the Humber River, removing any impact to baseflow.

— Toronto and Region Conservation pursued funding and partnership opportunities in order to develop and implement Greening Retail, a new program of The Living City that engages the retail sector in the application of sustainable practices and technologies. Toronto and Region Conservation secured \$25,000 from Environment Canada and \$6,000 in-kind from The Conservation Foundation of Greater Toronto to undertake and complete Phase One of the program. The results of the Phase One report confirmed the premise for Greening Retail in that doing the right thing for the environment can also be good for the bottom line. There are a great many environmental best practices that leaders in the sector are implementing but are not yet common practice across the sector. The objective of Greening Retail is to make the best practices of the leaders, common practice for the sector.

Having confirmed the premise for the program, TRCA secured an additional contribution of \$25,000 from Environment Canada, as well as \$20,000 from PowerStream. These funds are being used to carry out Phase Two research and prepare a web-based database of environmental best practices for the Greening Retail website in 2007.

— The Sustainable Community Development program is committed to working with organizations, agencies and municipalities to accelerate sustainable urban development in a way that best reflects the interests of our communities' social, economic and environmental health. Toronto and Region Conservation's aim is to enrich existing sustainable community initiatives and support the growth of environmentally friendly urban development.

The Block 39 project located in the City of Vaughan is currently Ontario's largest Energy Star community under development. The project was led by TRCA to explore what is possible in new community development, and as an additional feature to The Living City Campus. Block 39 grew into a project supported by the developer, four builders, the gas and electric utilities, the City of Vaughan and Canada Mortgage and Housing Corporation (CMHC). The framework used to educate the builders and engage community leaders on Block 39 is now being used to encourage future developments around the GTA.

— Across the country, regional and municipal governments are developing exemplary sustainable development programs. Many of these programs have put forth legislation, revised building codes, tax incentives and language specific to green design. Also, there are many demonstration projects and publications featuring voluntary or mandatory guidelines that advance green principles. The Association of Municipalities of Ontario, Canada Green Building Council (CaGBC) and TRCA staff distributed the Municipal Green Building Tool Kit in December 2006. The purpose of the tool kit project is to gather information about these existing resources and make the information accessible through various publications, including an interactive website. The kit will allow those interested in starting a green building and planning program quick and easy access to information about existing programs and models, case studies and tools of the featured programs.

— The Sustainable Technologies Evaluation Program (STEP) completed a study of the costs and savings to building owners installing green roofs in the GTA. The goal of the study was to develop a better understanding of the financial bottom line by looking at both the capital and lifecycle cost of a green roof relative to a conventional roof. The results will be used to better inform green roof policy decisions, including the type and magnitude of incentive that is required to motivate broader use of this technology.


In 2006, TRCA also became a corporate member of Green Roofs for Healthy Cities (GRHC) and is currently providing guidance to this organization in the development of a Green Roof Life Cycle Cost Calculator, intended to assist industry professionals responsible for green roof projects.

— In 2006, the monitoring protocol for the Permeable Pavement and Bioretention Swale Demonstration Project was revised to include sediment quality and infiltration tests of both the Seneca College site (in 2004, TRCA retrofitted a portion of a parking lot at Seneca College, King Campus with permeable concrete block pavement and a bioretention swale in order to monitor their performance as a stormwater infiltration technology) and at six older permeable pavement installations, as well as subgrade/pavement temperature and storage monitoring in order to answer concerns raised about pollutant accumulation and the affects of winter.

- Collecting rainwater from roofs and using it for non-potable domestic use (e.g., irrigation) can significantly reduce runoff, while at the same time relieve pollution and flooding pressures on local watersheds. This Rainwater Harvesting Demonstration Project was initiated in April 2006 and will continue until March 2008 to evaluate the benefit of rainwater harvesting (RWH) systems and explore potential barriers (e.g., cost, regulation) and incentives (e.g., tax benefits) for the adaptation of RWH on commercial properties. For this study, two sites were chosen: 1) Metro Label printing facility, and 2) a newly constructed condominium by Minto Developments. While both buildings are LEED-certified (Silver and Gold respectively) and will be using the RWH system for irrigation and several toilets, they differ significantly in rainfall collection area and water use demand. By observing the performance of these very different RWH systems in terms of water/sediment quality and quantity, considerations can be made in order to conclude the viability of RWH system applications in Toronto and the GTA.
- Community-based social marketing research and a survey of new home buyers was conducted to inform implementation strategies for lot-level stormwater management and naturalized landscaping. Recommendations from the studies are being incorporated in the watershed plans to address water balance and other sustainability objectives.

near-urban agriculture

The acquisition of property by TRCA since the 1950s resulted in an inventory of productive agricultural land which has historically been rented on an annual basis for conventional crops such as corn, soybeans, alfalfa and some livestock pasturing. Due in large part to the advance of urban sprawl, economic pressures and other needs for this land by TRCA, agricultural use has steadily declined. Today, there is a total of 2,960 acres (1,396 hectares) being rented for agricultural use: 2,000 acres (800 hectares) in the Rouge River watershed, 900 acres (360 hectares) in Humber River watershed and 60 acres (24 hectares) in the Duffins Creek watershed.



12. Agriculture is responsible for about a fifth of the world's greenhouse gas emissions—you can reduce your emissions simply by watching what you eat. Non-local produce travels an average of 5,000 kilometres to reach Ontario grocery stores.)

Source: *An Inconvenient Truth*>Take Action>What you can do, www.paramountpictures.co.uk/aninconvenienttruth/takeaction/whatyoucando

Toronto and Region Conservation could have a meaningful role in the evolution of a new kind of agriculture in the Toronto region because of its land base. A vision for a new form of agriculture on TRCA-owned lands includes making smaller farm areas more profitable through the use of new, innovative and land-intensive agricultural production methods. It will involve finding new partners and perhaps growing new kinds of crops to satisfy a need for locally grown products that cater to the changing demographics.

Contributing to near-urban agriculture will help achieve The Living City objective for sustainable communities:

- Promotes social equity and food security in communities by providing opportunities for increased accessibility to fresh, healthy foods.
- Provides opportunities for community economic development by helping to reduce the number of imports, and by creating jobs and meaningful work for the local people.
- Reduces our ecological footprint by providing locally grown and sold food, reducing food miles and green-house gas emissions related to food transportation.
- Imparting a space for celebrating the cultural diversity of communities by growing a new range of crops sought after by new Canadians.

Toronto and Region Conservation is currently working on a discussion paper and policy for agricultural use on TRCA-owned land. Other partners are also being sought that may have an interest in near urban agricultural ventures across TRCA's jurisdiction.

stewardship

Toronto and Region Conservation stewardship programs provide fun and educational experiences for people young and old. Programs are designed to equip participants with the knowledge and tools necessary to build healthy environments and sustainable communities. Most programming takes place in small-scale venues and events, allowing participants to be engaged one-on-one, through a practical and memorable experience. It's about being a good neighbour with nature!



The stewardship programs have two key focus areas: private land stewardship and watershed stewardship. Both programs attract many participants through hands-on demonstrations, interpretive outings, healthy home and garden tools, tips and workshops.

In 2006, private land stewardship programs continued to reach out, educate and engage landowners on their own lands through the Rural Clean Water Program, Caring for the Moraine—Oak Ridges Moraine Landowner Contact Program and Healthy Yards Program.

Special 2006 private lands stewardship program highlights include:

- The establishment of a Private Land Stewardship brochure and telephone hotline to streamline information for the general public.
- The Waterways Workshop pilot engaged 50 landowners from the Caledon area in six concurrent workshops focusing on pond management (including on-line ponds and wetlands), woodlot management, good land management practices, native gardening and wells and septs. This workshop was part two of a pilot project to generate and measure community involvement, and to present a one-stop venue to promote the many faces and technical talents of TRCA's Private Land Stewardship team, neighbouring conservation authorities and supporting regional partners.

In 2006, watershed stewardship programs continued to provide opportunities for individuals and communities to plant native trees and shrubs, create butterfly gardens, monitor and measure environmental health, and just enjoy "hoot and howls" for coyotes and owls. The suite of programs was implemented alongside our community partners in Malton, Vaughan, Pickering, Brampton and the City of Toronto.

Special 2006 watershed stewardship program highlights include:

- A successful EcoAction grant which saw the Ajax Community Greening Project added to TRCA's list of successful, community-focused stewardship programs.
- The Environmental Ambassador Program pilot project, which provided a newcomer to Canada with a six-month job placement. Toronto and Region Conservation's successful candidate delivered 30 stewardship events to over 2,500 participants in the north Scarborough community!

Through capacity building, TRCA encourages a personal commitment and change in behaviour towards the environment that collectively will result in sustainable communities and the health of our rivers and shorelines within them.

As part of our ongoing commitment to engage a diverse community of stewards, TRCA continued to host Canadian citizenship ceremonies. On March 28, 2006 at Kortright Centre for Conservation, 25 citizens—representing 14 countries—were sworn in by Her Honour Judge Ann Northcote. Following the swearing in, in true Canadian tradition, new citizens celebrated with an authentic pancake breakfast, with real maple syrup, and went on a guided tour of the Kortright sugarbush. On July 1, 2006, at the Albion Hills Conservation Area Chalet, 34 citizens were sworn in, supported by Nancy Stewart, MP, Town of Caledon.



“Let us think of education as the means of developing our greatest abilities, because in each of us there is a private hope and dream which can be translated into benefit for everyone and greater strength for our nation.”
—John F. Kennedy



13. Climate change is young people's biggest concern for the world's future, a government survey says.

Source: BBC News:
<http://news.bbc.co.uk/go/pr/fr/-/1/hi/education/4123884.stm>

education

The TRCA Education group is a team of centres and programs whose commitment to excellence in education has spanned 50 years. Collectively, TRCA Education, through its enriching overnight, day and outreach education programs, reached over 185,000 program participants for a few hours or a few days. Programs are designed to connect people, particularly young people, to their environment with fun and meaningful, hands-on exploration of local systems and sustainable technologies through: Black Creek Pioneer Village, Kortright Centre for Conservation, the Albion Hills, Claremont and Lake St. George education field centres, Watershed on Wheels, Investigating The Living City Spaces, Community volunteer education, seasonal TRCA park programs and more, as we engage in education that is charting the way to a more sustainable future in The Living City!

The TRCA Education group is a proud partner and participant in the Ontario EcoSchools Program—to help schools reduce their environmental impact by making decisions for a healthy world a part of everyday school life. In 2006, TRCA education facilities—Black Creek Pioneer Village, the Kortright Centre, and the Albion Hills, Lake St. George and Claremont field centres—joined the growing ranks of Ontario's Certified EcoSchools!



Power Trip Trail, Kortright Centre



Toronto and Region Conservation education centres are the first non-school-board facilities to achieve EcoSchools Certification, demonstrating our commitment to waste minimization, energy conservation, school-ground greening and ecological literacy. These four pillars of achievement are fully integrated into our programs. Whether it's through the Litterless Lunch program or students playing an active role in our "lights-off energy" audits, active support and participation helps us make a difference in our schools. And, through our participation and role modeling, we support and inspire others to join the growing number of EcoSchools, so, collectively, we can move towards a sustainable future.

In 2006, TRCA education staff from all program and department areas participated in a professional development course to support the implementation of TRCA education curriculum entitled *A Systems Thinking Guide to Learning in The Living City*. This curriculum set out the future concepts and directions for the re-orientation of TRCA environmental education towards sustainability education. The course was designed and implemented to achieve the following learning outcomes:

- To understand the purpose of re-orienting TRCA education products to a more disciplined approach to teaching systems-thinking and how it is related to sustainability.
- To understand the use, process and application of the general systems benchmarks and The Living City benchmarks in learning activities and programs.
- To build the skills to use and integrate systems-thinking tools into activities and programs.
- To develop new-and redevelop older-activities and programs into a collaborative portfolio of systems-thinking lessons.
- To build professional relationships and shared ideas among education colleagues from different facilities.

Some 2006 Education highlights:

field centres

- A celebration to thank Husky Injection Molding Systems Ltd. and Earth Rangers for enabling 10



years of student participation in the Husky/Earth Rangers Environmental Weeks program at the Albion Hills Field Centre.

- The capital revitalization of facilities for water and energy efficiency including new windows at Claremont Field Centre.
- The establishment of a leading-edge, one-day Global Positioning System (GPS) course at Lake St. George, adding current technology and practices to existing programs.

Black Creek Pioneer Village

- The launch of a new education program entitled *Life in a New Land*, comparing and contrasting 19th-century immigrants to Canada (why they came, what challenges they faced and how they co-operated to survive) with the experiences of new Canadians today.
- The incorporation of environmental learning into the social and historic education programming, truly exemplifying environmental learning “through the lens of culture and the arts.”

Kortright Centre for Conservation

- The switch to becoming “Bullfrog powered”— 100 per cent powered by green energy.
- Ducks Unlimited, one of TRCA’s partners, sponsored 110 classes to participate in a wetland study program at the Kortright Centre in the spring.

outreach education programs

- The Aquatic Plants Program completed a record year with over 48 planting events within a six-week period and the engagement of over 3,000 students and community group members to restore and learn about 13 local wetlands across TRCA’s jurisdiction.
- In addition to “marking” over 2,000 catchbasins and delivering supporting education material to over 7,500 homes, the Yellow Fish Road program introduced a new, interactive, non-point source pollution model showing the effects of agriculture, industry and urban impacts on watersheds.

Investigating The Living City Spaces Program

A successful spring program entitled Winged Migration was delivered at Tommy Thompson Park, under the sponsorship of the Imperial Oil Foundation, linking students to the scientific and restoration work of TRCA's Restoration Services division.

TRCA parks

Toronto and Region Conservation parks once again hosted, and participated in, the Peel and York children's water festivals at Heart Lake and Bruce's Mill conservation areas respectively. Collectively, and with the support of TRCA volunteers, 11,000 students experienced education in these outdoor classrooms, building their knowledge and skills about our regional water resources.

The Claireville Conservation Area hosted the Council of Outdoor Educators of Ontario's (COEO's) annual conference in the fall, in partnership with the Humber Arboretum and Guelph University at Humber College. Its theme was urban diversity, allowing TRCA staff and others to showcase existing programs and opportunities for environmental education in urban communities.

**“He enjoys true
leisure who has
time to improve his
soul’s estate.”
— Henry David Thoreau**

14. Over the last 600 million years, carbon dioxide concentrations have varied from perhaps 5,000 parts per million (ppm) to less than 200 ppm, due primarily to the impact of geological processes and biological innovations.

Source: Wikipedia, Climate Change: Human Influences on climate change



archaeology

Archaeological Resource Management Services had a very productive year with two crews working concurrently on 22 archaeological fieldwork projects and several heritage studies. During the fieldwork program, 20 previously unknown archaeological sites were discovered and registered with the province. Program highlights in 2006 include the 30th Boyd Archaeological Field School, that produced 28 successful graduates, as well as field investigations in the Rouge Park, at Colonel Danforth Park and the Lake St. George property, where one 19th-century farmstead and two Pre-Contact Aboriginal campsites were excavated and fully documented. The archaeology unit has also been incorporating new Ministry of Culture Standards and Guidelines into all aspects of archaeological assessments, and has been opening new lines of dialogue with First Nations communities, whose ancestral sites are located within TRCA's jurisdiction.

In October 2006, the Boyd Archaeological Field School's contributions to youth education was recognized with the presentation of the prestigious Peggi Armstrong Public Archaeology Award. For over 40 years, the field school has been an important stepping stone for many of the province's future archaeologists. Graduating over 1,000 students each year, the field school offers youth an introduction to archaeology theory and the opportunity to excavate a real archaeological site. The award recognizes Boyd's commitment to training students in fieldwork and in the interpretations of past peoples, and was administered by the Ottawa chapter of the Ontario Archaeological Society.



parks and culture

Black Creek Pioneer Village

- **Community engagement**—Black Creek Pioneer Village's (BCPV's) mandate includes engagement as an institution in the issues and needs of our community. Working with organizations such as the Centre for Spanish Speaking Peoples, the Jane and Finch Community and Family Services, and the wider network of social service organizations, BCPV provided meeting space and free admission for a wide range of client groups in our immediate community, as well as a performance venue for local artists and events.
- **Sustainability agenda**—Black Creek Pioneer Village moved its efforts in sustainable living to a new level in 2006 by creating the exhibition **POWER RESOURCEfulness: Energy and Innovation in the 19th Century**, achieving silver certification as an EcoSchool, initiating new education programs based on systems thinking, and introducing more natural heritage components at the very popular Hands-on Discovery Centre.
- **Roblin's Mill project**—Replacement of the mill flume at Black Creek's spectacular water-powered grist mill was the major engineering project completed in 2006. When operating at full capacity, the flume holds over 60,000 gallons of water, which cascades over the massive mill wheel, turning it at a rate of 100 revolutions per minute. At peak operation, the mill can grind about 500 pounds of grain in 90 minutes. Repairs now completed will enable the mill to be back in full operation for the 2007 season.
- **Holiday success**—Over 5,000 turkey dinners were served at BCPV during the December 2006 holiday season!
- **Fundraiser for Dalziel Barn**—The Friends of Black Creek organized and hosted The Village and the Vineyard, raising funds for the restoration of the 1809 Dalziel Barn, which was the home of Canada's first agricultural museum. Restoration and planning work will commence in 2007 for the Dalziel Barn's bicentennial in 2009.

Heart Lake Conservation Area recreational plan (2007)

- **Splash-pad**—A nature-themed children's splash-pad with interactive elements will be constructed at Heart Lake. This water-play area will include water conservation/sustainability features to minimize the ecological footprint.
- **Tree-top adventures**—Toronto and Region Conservation will partner with a company to design, construct and manage a tree-top "canopy" adventure course. This course will include a number of confidence-and-team-building obstacles within the forest canopy.
- **Trail system**—A new trail system will be developed, which will include interpretive signage.

campground upgrades

- **Trailer rental program**—Albion Hills Campground purchased five vacation rental trailers. This public rental program allows visitors, who do not have access to camping equipment, the opportunity to experience the joys of camping in the great outdoors. This program has been a great success.
- **Water upgrade**—Albion Hills' water supply has been upgraded from well supply to municipal.
- **Solar hot water system**—The addition of a solar hot water system at Indian Line Campground has assisted in reducing hydro consumption significantly.
- **WIFI**—Wireless internet service has been installed throughout Indian Line Campground in an effort to meet the needs of the today's traveler.

mountain bike program

Toronto and Region Conservation and Chico Racing Inc. have partnered together to offer two of the top 10 mountain biking events in North America—*24 Hours of Summer Solstice* and *Hot August Nights*.

park attendance

The many upgrades to services, facilities and programs have resulted in record attendance for the camping and the mountain biking program at Albion Hills Conservation Area.

Bathurst Glen Golf Course

In 2006, Bathurst Glen Golf Course became a proud member of the Audubon Cooperative Sanctuary Program, receiving environmental planning certification, naturalizing more than four acres of previous manicured turf, increasing cultural practices to reduce maintenance and chemical application and completing plans for additional Wildlife and Habitat Enhancement for 2007 implementation. (The Audubon Sanctuary Program helps golf courses enhance wildlife habitats and protect natural resources for the benefit of people, wildlife and the game of golf. The program is designed to give golf course managers the information and guidance they need to implement stewardship projects and receive recognition for their efforts.)



Kids Free campaign

To further address social concerns regarding health and to promote environmental awareness, TRCA introduced the Kids Free campaign in 2006. By alleviating the financial barriers of entry to TRCA parks, with the goal that more families with young children will take the opportunity to visit TRCA facilities, we hope to encourage physical recreation opportunities. The more children are exposed to nature, the greater their appreciation about the importance of the environment and the value of conservation.

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15. As recent estimates of the rate of global warming have increased, so have the financial estimates of the damage costs. At an Intergovernmental Panel on Climate Change (IPCC) conference in April 2007, delegates from 120 nations discussed the specific economic and societal costs of mitigating global warming, and eventually approved the IPCC Fourth Assessment Report, which indicates general consensus that benefits of mitigation are worth the mitigation costs.

Source: http://en.wikipedia.org/wiki/Economics_of_global_warming





October 2006 Salmon release in Duffins Creek

“With the growing urgency of climate change, we can not have it both ways.

We can not shout from the rooftops about the dangers of global warming and then turn around and shout even louder about the ‘dangers’ of windmills.”

—David Suzuki

business excellence— responding to nature

2006 highlights

- The Living City agenda advanced by the unanimous approval of the largest budget in TRCA's history—\$100 million.
- Implementation of a new Electronic Document Management System (Laserfiche).
- Achieved a 2006 operating budget surplus of \$425,000.
- Toronto and Region Conservation's Environmental Volunteer Network (EVN) launched the Professional Access and Integration Enhancement (PAIE) Program, with funding from the Ministry of Citizenship and Immigration.
- Claremont, Lake St. George and Albion Hills field centres, the Kortright Centre for Conservation and Black Creek Pioneer Village joined the ranks of Ontario's 112 certified EcoSchools. Toronto and Region Conservation is the first conservation authority, and non-school board, to achieve Ontario EcoSchools certification; Black Creek Pioneer Village is the first museum to achieve certification.

corporate services

information technology and services

The Information Technology and Services department had an exciting and challenging 2006. Each of the three staff groups were faced with a variety of projects and realized a series of ongoing successes.

IT group

- Over 60 PCs were purchased and deployed to staff as part of the ongoing computer replacement schedule.
- A new payroll server was deployed in 2006.
- Visitors and guests can now access the internet for presentations and functions via a new wireless access point at Black Creek Pioneer Village.
- Enforcement officers and flood duty officers now have improved communication capabilities from a new mobile radio system.

- An electronic purchase order system was developed on the Lotus Notes platform.
- A number of business process tracking systems were initiated in 2006 to build efficiencies in delivering services to the public, our partners and staff.
- Ongoing development of Envirobase—TRCA's scientific data warehouse for information such as water quality, flow, natural heritage, etc.—has been made. Preparation for the migration of Envirobase to an enterprise-scale relational database, MS SQL was done in 2006, to be completed in 2007.
- A new self-contained air conditioning unit was installed in TRCA's head office central server room to improve the operating environment of computer hardware.
- Since the implementation of TRCA's IT Strategic Plan in 2003, the IT group has maintained an overall service level of 99.9 per cent network uptime.
- An IT Disaster Prevention and Recovery Plan was developed and approved by the Business Excellence Advisory Board in April 2007.
- In 2006, IT staff responded to over 470 individual IT service requests by staff.

records management/office services

- Full implementation of the electronic document management system (EDMS) was underway in 2006; Laserfiche client software was installed on all head office PCs and many computers throughout the Wide Area Network.
- Significant improvements were made to the TRCA records database to facilitate changes in provincial regulation and improve workflow.
- Over 20 staff training sessions were conducted for Laserfiche software.
- Scanning and file conversion into the EDMS increased dramatically in 2006. The Laserfiche document management database now contains over 20,000 documents.
- Key documents in Laserfiche include property deeds, TRCA meeting minutes from 1957 to present day, insurance policies and many archival records.
- A comprehensive digital photo library (culled from TRCA's vast archive of photographic images, dating back to Hurricane Hazel, has been created in Laserfiche.

GIS/mapping

- The completion of the new Generic Regulation map series was a significant challenge in 2006. This project included the development of new analytical tools, modeling a number of environmental and physical criteria, photo interpretation, quality control, policy development and map production. The Generic Regulation map series consists of 132, 1:10,000 orthophoto maps for TRCA's jurisdiction.
- The TRCA floodplain mapping program finalized 180 engineered, digital flood line maps.
- Toronto and Region Conservation entered into a research partnership with Cornell University. The project used GIS analysis to develop a watershed-based ecological model.

- Finalized the GIS modeling for the TRCA Terrestrial Natural Heritage System Strategy. This model was adapted for input into watershed plans for the Rouge, Humber and Don rivers watersheds.
- Produced a large number of map series and analyses for the ongoing watershed plans, watershed report cards, area management plans, etc.
- Implemented a new client/server GIS solution for staff to access mapping data across the organization using ArcReader. Specific applications have been created for many business units, addressing key requirements for decision making.
- Entered into a partnership with Conservation Ontario and the Ministry of Natural Resources for the development of an internet mapping portal. The portal, called CACIMA (Conservation Authorities Common Internet Mapping Application), is a pilot project funded by the GEO Smart Fund, which has developed a common platform for conservation authorities across Ontario to make use of internet mapping technologies cost-effectively.
- Supported the CTC (Credit Valley Conservation Authority/Toronto and Region Conservation Authority/ Central Lake Ontario Conservation Authority) Source Water Protection Region on a wide variety of data integration, analysis, mapping and standards development projects.
- In 2006, the GIS/Mapping group responded to over 800 Geomatics service requests from TRCA staff, the public and municipal partners.

sustainability management system

In June 2006, Claremont, Lake St. George and Albion Hills field centres, the Kortright Centre for Conservation and Black Creek Pioneer Village joined the ranks of Ontario's 112 certified EcoSchools. Toronto and Region Conservation policy and guidelines, as set out in the Sustainability Management System (SMS), were also fully integrated into the EcoSchools Certification Guide. In becoming the first conservation authority and non-school board to achieve Ontario EcoSchools certification, TRCA is demonstrating its commitment to educating for sustainable living. Black Creek Pioneer Village is also the first museum to achieve certification.

In October 2006, TRCA resolved to participate in the EcoSchools program in 2006–2007. As well as meeting on-going challenges from the previous school year, such as a more explicit integration of a systems-thinking approach in the curriculum, or more effective delegation of the EcoTeam's tasks, TRCA education facilities want to 'raise the bar' in a few key areas, including the following:

1. Litterless lunches and snacks be promoted to visiting classes as a means to increase their participation in TRCA's EcoSchools program, while decreasing the production of waste at the education facilities, along with efficient diversion of waste produced by visitors to either recycling or compost bins.
2. Research on efficient ways to purchase a greater amount of local and organic produce and foodstuffs as a means to decrease the education facilities' ecological footprints. Some facilities have already begun to purchase fair trade coffee and tea (Kortright) and are experimenting with biodegradable cups and plates (BCPV). Collectively, staff are also researching various options for more ethical and ecologically friendly food purchasing.
3. Promotion of EcoSchools program to other conservation authorities and district school boards as a means to creating a culture of sustainability in Ontario.

fleet services

- In 2006, TRCA targeted higher-use vehicles such as Central Services' vehicles and the enforcement officers' vehicles. In 2006, we purchased two new central services vans; one vehicle has a smaller gasoline V8 motor than in previous vans and the other vehicle is powered by a diesel motor. The gasoline van improved by one litre/100 kilometres and the diesel-powered van's fuel use was six litres/100 kilometres—a 30 per cent improvement in efficiency.
- Two of the enforcement vehicles were replaced with Honda Ridgeline pick-up trucks. The improvement in fuel usage was three and four litres/100 kilometres—a 15-20 per cent improvement respectively.
- A new Toyota Prius vehicle was purchased in 2006 to replace the damaged Honda Civic Hybrid.
- As part of a test program, we have placed a small, gas-powered coolant heater in a central services cargo van. This unit, called BlueHeat, uses the vehicle's existing fuel and electrical supply to heat the engine coolant and circulate it to heat the engine and vehicle interior, simultaneously defrosting the windshield without idling the engine. It uses a small amount of fuel (.6 litres/hour) to heat the coolant. This program is aimed at reducing idling. If this unit works efficiently this winter season, we may install the units in other TRCA trucks.
- An improvement to the mileage recording sheets for all TRCA vehicles to now include the number of passengers per trip will help us target the types of vehicles we'll be required to purchase to meet the needs of each location. This information is primarily important for the pool vehicles at head office and the Downsview office.
- Toronto and Region Conservation is now using BioDiesel at the Claremont Field Centre and the Kortright Centre in the landscape equipment. Technical problems with the motors have not been encountered and TRCA plans to expand the use of Bio-Diesel fuel to the Glen Haffy Conservation Area and the nursery in the summer of 2007. All fuelling sites will be inventoried in spring 2007 and we will be replacing them on a priority basis over the next two years.

volunteerism and diversity

Building on 2005, 2006 proved to be another successful year for the Environmental Volunteer Network (EVN):

- Manulife Financial invested \$125,000 over a three-year period to help the EVN continue its initiatives focusing on enhancing volunteerism and diversity in the Greater Toronto Area (GTA).
- One-hundred and two new, eager and enthusiastic volunteers joined the EVN, growing the network to over 2,000 volunteers.
- Toronto and Region Conservation, in partnership with the Diversity Network, launched the *Diversity Toolkit: Diversify your workplace* to increase awareness and foster appreciation for cultural diversity in the workplace. This toolkit has become a resource to many organizations across the GTA, as well as in Regina, Halifax, Calgary, Vancouver, Winnipeg and Sydney, Australia.



- The EVN launched the Professional Access and Integration Enhancement (PAIE) Program with funding from the Ministry of Citizenship and Immigration to assist internationally trained professionals gain access to the planning and geoscience professions.

On August 3, 2006, with a \$402,300 investment from the Ontario Ministry of Citizenship and Immigration, TRCA, in partnership with Accessible Community Counselling and Employment (ACCES), the Association of Professional Geoscientists of Ontario (APGO), the Canadian Institute of Planners (CIP), the Faculty of Environmental Studies (FES) at York University and the Ontario Professional Planners Institute (OPPI), launched the Professional Access and Integration Enhancement (PAIE) Program. As one of TRCA's new social initiatives, the PAIE Program aims to address barriers faced by internationally trained professionals

to help them gain Ontario-specific experience, employment and professional registration in the fields of planning and geoscience. The PAIE program will provide internationally trained planners and geoscientists with training and work experience in their respective fields, offering three months of classroom training followed by nine months of full-time, high-skilled work experience with a host organization, in both the public and private sectors.

After an intensive application and panel interview process, 14 planners and 21 geoscientists succeeded in becoming the first group of participants in the PAIE program. Scheduled to start in January 2007, all 35 participants will begin their three-month work-shop component. In April 2007, after completion of the workshops, 26 participants will continue to the nine-month work placement and seven participants will move into a mentorship experience to gain the hands-on work experience necessary to continue their professional careers in Canada.

recognition awards program

The Recognition Awards Program, adopted in 1976, pays tribute to those who have made a significant contribution to the work of TRCA and includes Honour Roll Awards and Service Recognition Awards.

The Honour Roll Awards were presented on Friday, June 23, 2006, at Black Creek Pioneer Village. Recipients included:

- Andrew Ferguson and Eberhard Zeidler for their dedication and commitment to the protection of the environment through their generous donation of a significant piece of property in the lower Don River valley and for their continued cooperation which will provide long-term protection of the natural heritage and unique ecological features in the valley corridor.
- Larry Noonan for his leadership and passion as the driving force behind the Altona Forest Stewardship Committee and for his personal commitment as an environmental steward, community leader and stakeholder.

- Lesley Price for her personal dedication to the work of TRCA as a founding member of the Milne Park Conservation Association and as a wildlife interpreter at the Kortright Centre for Conservation, and for her volunteer fundraising efforts, which generated approximately \$250,000 toward the environment for current and future generations.

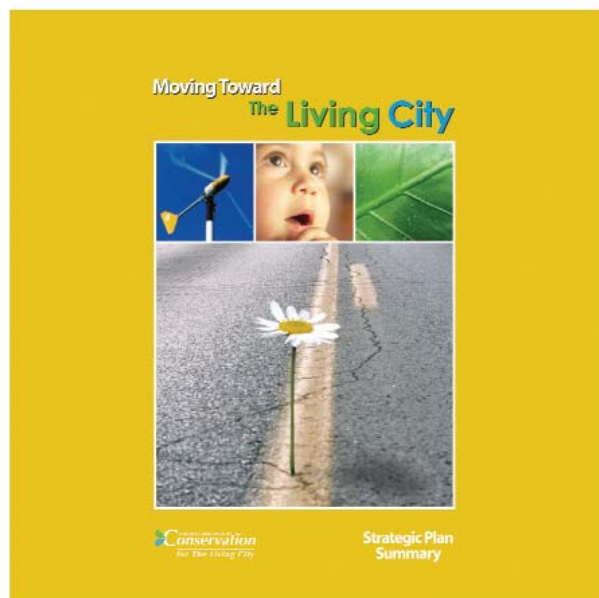
- Cynthia Wilkey for her gifts of thoughtful insight, passionate advocacy and tireless involvement on behalf of the citizens of all of Toronto, and their collective vision for a revitalized waterfront and for her inspired leadership as chair of the West Don Lands Committee, which represents many citizen groups and organizations in Toronto.



The Service Recognition Awards are based on years of service—three, six and 10 years for volunteers and members, including TRCA's watershed committees; and 10, 15 and 25 years for staff. Awards will be presented in 2007.

The Employee/Recognition sub-committee consists of chair Gerri Lynn O'Connor and members David Barrow, Maja Prentice and Dick O'Brien.

marketing and communications



Mark Cullen continued with TRCA in 2006, as a spokesperson for The Living City. Mark was a key participant at many TRCA events, and further promoted TRCA's conservation messages and events on his weekly radio gardening show, broadcast on CFRB 1010. Mark will continue to support TRCA and its vision for The Living City throughout 2007.

Media coverage increased by approximately 40 per cent over prior year's. Many of our events continue to garner a significant amount of media attention. And published articles (both print and electronic mediums) based on media releases, as well as interviews with TRCA staff have surpassed listings in quantity—TRCA is becoming recognized as a source for accurate and detailed information in our many areas of expertise.

In March, we launched *Ecolife... the pulse on your living city*, TRCA's FREE monthly e-bulletin, containing information on upcoming events, exciting projects around our watersheds, a feature story from our naturalist, Allan Foster, conservation tips and more! Our current subscriber base is in excess of 5,500.

We continued to track impressive growth on our website—visits increased by 25 per cent over 2005—and furthered our pursuit to improve the visitors' experience, which yielded positive results:

- **July**—Healthy Yards online interactive Flash photo gallery (<http://www.trca.on.ca/yards>)
- **July**—The Living City homepage revamp
- *Sustainability News* section added in November.
- **August**—Parks and Culture: New website launched
- **October**—Capture the Humber: Online photo submission contest
- **November**—revamp of Conservation Foundation section
- Improved online donation messaging and application—*5 Ways you can help*
- Gifts for clean air / water was a popular item during the holiday season
- Received positive feedback on the improved navigation and ease of purchasing "gifts" online
- Plant Trees for Life donations increased over 2005

Launched at TRCA's largest annual meeting in its history was our journey to achieving TRCA's The Living City vision—outlined and published in TRCA's 2006 strategic plan summary, *Moving toward The Living City*, which identifies the integration of climate change as a critical component in achieving the objectives and goals of a healthy, sustainable urban region extending into the 22nd century.

Toronto and Region Conservation has a unique opportunity to be on the leading edge of integrating and sharing adaptation strategies in the area of water management, terrestrial and aquatic habitats, and energy efficiency within our area of jurisdiction—and beyond.

conservation foundation

Once again, the Charles Sauriol Environmental Dinner was a great success. Over 700 people celebrated three outstanding gifts of greenspace on the precious Oak Ridges Moraine, the source for the Toronto region's rivers.

Award-winning novelist Margaret Atwood was the guest speaker. A long-time environmentalist and a keen bird watcher, Margaret's remarks were humorous and profound. And the day following the event, they were published in the *Globe and Mail*.



Margaret Atwood and Brian Denney

The conservation community is already looking forward to the 14th dinner, which will be held in the fall 2007, featuring Robert Kennedy Jr. as the keynote speaker.

financial overview

In 2006, TRCA approved a budget representing the largest amount of environmental investment in its history—\$34.9 million for operating expenditures and \$66.4 million for capital projects. The capital budget continues to be driven by TRCA's participation in the work of the Toronto Waterfront Revitalization Corporation, representing over 50 per cent of proposed capital spending.

Toronto and Region Conservation's municipal funding partners continue to provide the core support for TRCA operating programs, accounting for about 30 per cent of all funding. Non-municipal operating revenues continued to grow, increasing by 14.8 per cent over the 2005 actuals. In addition to healthy revenue growth for the Kortright Centre, education field centres and Black Creek Pioneer Village, TRCA has added the management of Bathurst Glen Golf Course to the scope of its activities in anticipation of a larger management agreement with the province for what will be the Kettle Lakes Nature Reserve Park in Richmond Hill. Development services fees are significant sources of revenue, growing by 20 per cent to \$2.7 million. The province funded the Source Water Protection program, which was a new conservation authority-led initiative started in 2005. At year end, an operating budget surplus of \$425,000 was achieved.

Among the 2006 capital projects, work was begun on the LEED-rated Restoration Services Centre, with actual expenditures of \$2.1 million. This project will be completed in 2007. Delays in various projects including erosion works, conservation park enhancements and the Restoration Services Centre resulted in deferral of spending. Within the capital accounts, a deficit of \$666,000 was incurred, mostly as a result of a shortfall in funding for the Restoration Services Centre, which will be financed over the next several years.

Land acquisition expenditures were significant in 2006, totaling \$5.5 million. Revenue raised for this purpose was sufficient to pay prior years' acquisitions as well, which eliminated the deficit in the land accounts.

At year end, expenditures from all sources exceeded revenues and reserve allocations, leaving a modest deficit of about \$240,914. This is added to the cumulative deficit which was \$830,664 as of December 31, 2006. Reserves were drawn down substantially from \$3.2 million to \$1.9 million to pay for the Restoration Services Centre. Toronto and Region Conservation cash flows are sufficient to ensure no borrowing is required.

Toronto and Region Conservation Authority **Member Municipalities and Members 2006**

Town of Mono and Township of Adjala-Tosorontio

G. Mason

The Regional Municipality of York

D. Barrow*
M. Di Biase*
B. Fisch
B. O'Donnell
L. Pabst

The Regional Municipality of Durham

C. Jordan
G. L. O'Connor*
D. Ryan*

The Regional Municipality of Peel

F. Dale*
E. Moore
M. Prentice
J. Sprovieri
N. Stewart

City of Toronto

P. Ainslie (Feb. 24–Dec.31, 2006)
M. Augimeri*
B. Balkissoon (Jan.1–Feb.24, 2006)
G. Cowbourne
G. De Baeremaeker
R. Ford*
P. Gough
D. Gurin
S. Hall*
N. Kelly
P. Milczyn
D. O'Brien (Chair)*
S. Petrie
A. Schulz
M. Thompson

Executive Committee

Chief Administrative Officer / Secretary Treasurer

B. Denney

Director, Watershed Management

A. Freeman

Director, Finances and Business Services

J. Dillane

Director, Planning and Development

C. Woodland

Director, Restoration Services

N. Saccone

Director, Parks and Culture

D. Edwards

Director, Ecology

D. Martin-Downs

**Executive Committee Members*

Toronto and Region Conservation Authority **Summarized Financial Statements** December 31, 2006

Auditors' Report

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To the Members of the **Toronto and Region Conservation Authority**

The accompanying summarized statements of financial position and financial activities and deficit are derived from the complete financial statements of the Toronto and Region Conservation Authority as at December 31, 2006 and for the year then ended on which we expressed an opinion without reservation dated April 4, 2007. The fair summarization of the complete financial statements is the responsibility of the Authority's management. Our responsibility, in accordance with the applicable Assurance Guideline of the Canadian Institute of Chartered Accountants, is to report on the summarized financial statements.

In our opinion, the accompanying financial statements fairly summarize, in all material respects, the related complete financial statements in accordance with the criteria described in the Guideline referred to above.

These summarized financial statements do not contain all the disclosures required by Canadian generally accepted accounting principles. Readers are cautioned that these statements may not be appropriate for their purposes. For more information on the Authority's financial position and results of financial activities and cash flows, reference should be made to the related complete financial statements.

Markham, Canada
April 4, 2007
Grant Thornton LLP
Chartered Accountants
Licensed Public Accountants

Toronto and Region Conservation Authority

Summarized Statement of Financial Activities and Deficit

Year Ended December 31

	2006 budget	2006 actual	2005 actual
Expenditures			
Watershed management and health monitoring	\$ 25,204,001	\$18,495,572	\$8,593,258
Environmental advisory services	3,778,299	3,692,577	3,711,406
Watershed stewardship	12,213,200	9,817,716	6,996,044
Conservation land management, development and acquisition	38,455,500	35,070,628	25,752,425
Conservation and education programming	16,047,000	15,254,922	13,821,526
Corporate services	5,627,900	5,244,585	4,833,133
Vehicle and equipment, net of usage charged	–	27,129	134,295
	<u>101,325,900</u>	<u>87,603,129</u>	<u>63,842,087</u>
Revenue			
Municipal			
Levies	26,902,400	21,097,727	21,771,302
Other	5,407,300	8,081,985	2,246,443
Government grants			
MNR transfer payments	845,800	845,753	845,753
Provincial (other)	3,192,200	5,552,902	2,252,108
Federal	1,499,400	1,588,217	1,110,042
Authority generated			
User fees, sales and admissions	13,937,000	13,003,163	10,964,378
Contract services	573,700	334,321	641,027
Interest income	360,000	473,446	396,122
Proceeds from sale of properties	600,000	330,658	1,030,523
The Conservation Foundation of Greater Toronto	1,235,100	2,896,712	1,454,127
Donations and fundraising	2,786,700	1,154,588	1,433,404
Facility and property rentals	2,249,400	2,218,706	2,256,811
Canada Post Corporation agreement	81,600	34,946	36,164
ORM Corridor Park contribution agreement	1,200,000	1,054,085	–
Toronto Waterfront Revitalization Corporation	36,997,600	26,420,408	15,707,086
Sales and property tax refunds	–	244,350	220,187
Sundry	604,500	676,731	1,068,685
	<u>98,472,700</u>	<u>86,008,698</u>	<u>63,434,162</u>
Excess of expenditures over revenue	(2,853,200)	(1,594,431)	(407,925)
Appropriations from reserves	1,603,200	1,353,517	254,848
	(1,250,000)	(240,914)	(153,077)
Deficit, beginning of year	(589,750)	(589,750)	(436,673)
Deficit, end of year	<u>\$(1,839,750)</u>	<u>\$(830,664)</u>	<u>\$(589,750)</u>

Toronto and Region Conservation Authority

Summarized Statement of Financial Position

December 31

	2006	2005
Assets		
Cash and cash equivalents	\$10,618,733	\$5,930,969
Marketable securities	3,998,647	3,698,374
Receivables	13,552,566	9,855,518
Inventory	521,009	533,232
Prepays	185,403	163,543
	<u>\$28,876,358</u>	<u>\$20,181,636</u>
Liabilities		
Payables and accruals	\$15,478,710	\$ 6,962,306
Deferred revenue		
Municipal levies	6,372,978	5,399,556
Capital, special projects and other	5,982,184	5,182,857
Vacation pay and sick leave entitlements	1,645,898	1,561,781
	<u>29,479,770</u>	<u>19,106,500</u>
Fund Balances		
Reserves	1,873,150	3,226,667
Deficit	(830,664)	(589,750)
	<u>1,042,486</u>	<u>2,636,917</u>
Amounts to be funded in future years	(1,645,898)	(1,561,781)
	<u>(603,412)</u>	<u>1,075,136</u>
	<u>\$28,876,358</u>	<u>\$20,181,636</u>

On behalf of the Authority
Chair
Secretary-Treasurer

“The good news is we know what to do. The good news is we have everything we need now to respond to the challenge of global warming. We have all the technologies we need, more are being developed and as they become available and become more affordable when produced in scale, they will make

**it easier to respond.
But we should not
wait, we can not wait,
we must not wait.”
—Al Gore**

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