

volume 4

Toronto's Ravines: Intersection of Nature and City



What is the Chief Planner Roundtable?

The Chief Planner Roundtable is a public forum for Torontonians to discuss key city-building challenges and to identify innovative "drivers for change." The Roundtables are founded on a platform of collaborative engagement, where industry professionals, community leaders and City staff can discuss pressing issues in an open and creative environment. A variety of options for participation are available including attending in person, watching the live-stream online and contributing to the conversation via Twitter, comment cards, or e-mail. This flexible and informal forum enables the City Planning Division to form new partnerships with community and city-building advocates, other City Divisions, the private sector, academics and beyond. The Chief Planner Roundtable reinforces City Council's Strategic Plan principle of community participation and the Official Plan policy of promoting community awareness of planning issues.

toronto.ca/planning/chiefplannerroundtable



CHIEFPLANNER round table

No other city in the world has a ravine system like Toronto. It forms an extensive, connected network of natural open space that reaches into almost every neighbourhood, intersects with a diverse array of cultures, communities and uses, and connects us to the larger bioregion. Together with the shoreline of Lake Ontario, the ravines enhance our city and distinguish it from others. They contribute to our high quality of life by providing unique opportunities for people to connect with nature, passive and active recreation opportunities, social gathering places, respite from urban life, unique destinations and a link to our history. Ravines contain most of the City's natural areas, contribute to the health of our environment and provide valuable ecosystem services.

We are at a critical juncture. As our city and the surrounding region become increasingly urbanized, ravines are more important to our guality of life than ever. Our collective challenge is to ensure that we protect, manage and invest in these important public spaces to ensure that the ravine system continues to function and flourish and contributes to a high quality of life in our city.

The Ravine Roundtable discussion touched on a variety of issues including the need to celebrate and invest in the ravine system, build physical and social connections between residents and the ravines and, most importantly, protect, restore and enhance their natural characteristics. I would like to thank the panelists who participated in the Roundtable and the Mayor, City Councillors, staff and many residents who attended. I look forward to continuing the conversation about ravines — Toronto's hidden treasure.

Let's build a great city together!

Jennifer Keesmaat, M.E.S., MCIP, RPP Chief Planner & Executive Director, City Planning Division



A City of Ravines

Toronto's extensive network of ravines offers unparalleled natural beauty and opportunity for outdoor recreation. They have contributed to our identity and shaped how our city has grown. Ravines have long been valued by the people who live here. The Don and Humber River valleys were important fishing and trade routes for First Nations peoples; Elizabeth Simcoe enthusiastically explored and recorded their beauty in 1793; and their natural beauty was used to help sell the City in the early nineteenth and early twentieth centuries. These distinctive topographic features have also been seen as obstacles. As Toronto began to develop, many ravines were filled in or reshaped to accommodate infrastructure. The preservation of Toronto's river valleys and ravines was initially based on creating a regional park system to meet recreational needs. It was the destructive flooding caused by Hurricane Hazel in 1954 that spurred huge public investment in acquiring flood prone valley lands for the dual purpose of public safety and public recreation. The resulting legacy is a parkland system throughout the City that is now enjoyed by all Torontonians.

Today, Torontonians are passionate about their ravines. In 2015, the City conducted a survey asking residents what was important to them about ravines. The response was exceptional. Over 90 percent of respondents said the ravines were very important to their quality of life. Most of all, people value the natural character of the ravines and want it protected. They seek out the ravines to enjoy a wide variety of activities from passive recreation, to biking, to large group activities. "Ravines are 'the physical soul of our city' and Toronto's greatest natural treasure."

> John Tory Mayor, City of Toronto



Toronto's Ravine System and Surrounding Bioregion

> Ravine and Natural Feature Protection By-law Environmentally Significant Areas Greenbelt Protected Countryside Oak Ridges Moraine Area Greenbelt River Valley Connections

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Background

Toronto's river valleys and ravines were formed by running water over the past 12,000 years. Toronto's ravine system includes six main watersheds, each with its own unique characteristics - Etobicoke Creek, Mimico Creek, Humber River, Don River, Highland Creek and Rouge River. Four of these watersheds have their headwaters in the Oak Ridges Moraine. The ravines are the foundation of the City's natural heritage system. They contain most of Toronto's remaining natural areas and environmentally significant areas, including remnants of the native landscape, such as forests, meadows, wetlands and floodplains and an impressive variety of plants and animals including significant species. They provide many irreplaceable ecological functions, such as helping to cool the air, clean the water and convey flood waters. The ravines also contain many cultural and historic sites and connect us with Toronto's rich history and First Nations heritage. Almost two thirds of the ravines are publicly owned. These parklands offer unparalleled access to nature and opportunities for active and passive outdoor recreation, including an extensive network of trails. Some ravines also contain important above and below ground infrastructure, such as roads, rail lines, hydro corridors, watermains and sewers.

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'S RAVINE SYSTEM MAKES UP 11,000 HECTARES TORONTO'S LAND AREA

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Background

Protecting and managing the ravine system is a joint effort. The Toronto and Region Conservation Authority (TRCA) owns most of the public land and plays an important role in the protection, enhancement and management of ravines. Toronto's ravines are largely managed by the City's Parks, Forestry and Recreation Division and many areas have specialized plans to manage natural habitats and invasive species. There are also numerous stewardship groups that undertake planting and restoration. Both Urban Forestry and TRCA staff work with private land owners to identify and protect natural features. Toronto Water also undertakes work to restore ravines when it rebuilds watercourses to increase their ability to withstand erosive forces caused by storms and upgrades water infrastructure to protect public health and safety.

"The management and decision making around ravines is quite complex. The foundation needs to be the natural environment."

Carolyn Woodland

Senior Director, Planning, Greenspace and Communications, TRCA







Protecting the Ravines

GUIDELINES, such as natural area management plans and the Natural Environment Trail Strategy, provide direction on how to protect the natural environment and manage recreational activity.

The **RAVINE AND NATURAL FEATURE PROTECTION BY-LAW** protects the forest and the ravine landform by prohibiting the injury or destruction of trees and filling, grading or dumping within the grea regulated by the by-law unless a permit has been issued by the City.

TRCA's **REGULATION 166/06** protects valley and stream corridors, wetlands and the Lake Ontario shoreline by prohibiting filling, changes to grade, alteration of a watercourse or wetland, or building anything within the protected area unless a permit has been issued by TRCA.

Ravines are part of the City's NATURAL HERITAGE SYSTEM. Development is generally not permitted in the natural heritage system and a natural heritage impact study may be required to identify, avoid or mitigate impacts.

ENVIRONMENTALLY SIGNIFICANT AREAS (ESAs) contain habitats for rare species, unusual landforms, habitats of large size or unusually high diversity or serve as an important stopover for migratory wildlife. Development and site alteration are not permitted in ESAs and activities are limited to those that are compatible with the preservation of their natural features and ecological functions.

OFFICIAL PLAN LAND USE POLICIES AND DESIGNATIONS protect

the ravines as part of the City's parks and open space system. Development is generally prohibited within ravines, with some exceptions such as compatible recreational and cultural facilities and essential public works. Development adjacent to ravines is required to be set back from the top of the bank of the ravine. The **ZONING BY-LAW** implements the Official Plan.







The Roundtable

Our city's population is expected to reach 3.4 million people by 2041. At the same time as we are planning for attractive, liveable, urban areas, we need to plan for a strong and resilient ravine system. Population growth, invasive species and climate change are all putting increased pressure on ravines. In this context, how should we balance protection, management, use and enhancement of ravines? There is also growing interest in celebrating and promoting the ravines as a destination. How can we ensure the long-term protection of the ravine features and functions with increased use? Can we better balance the intersection of city and nature? How can we engage and inspire current and future generations to tread lightly and better connect people with nature? These challenges, among others, were discussed by seven expert panelists at the Chief Planner's Roundtable on Ravines: Intersection of Nature and City.

"How do we include everyone while balancing protection of the ravine ecosystem with expanded use? Achieving consensus among such different users is the largest trial facing the ravines."

Janie Romoff

General Manager, Parks, Forestry and Recreation, **City of Toronto**

panelists



Janie Romoff

Janie Romoff is General Manager of the Parks. Forestry and Recreation Division. Her responsibilities include overseeing community recreation, parks, horticulture and forestry programs, park and open space planning, capital development and environmental initiatives. Janie spoke about finding the right balance between conservation, protection and use of the ravine system.

Dr. Faisal Moola, PhD

Faisal Moola is one of Canada's most respected environmental scientists and advocates. His research in conservation science and environmental policy has been published in numerous academic journals and award-winning books. He also has adjunct faculty appointments at the University of Toronto and York University. Faisal spoke about the value of ravines as natural capital in the context of a changing climate.





Carolyn Woodland

Carolyn Woodland is Senior Director, Planning, Greenspace and Communications for the Toronto and Region Conservation Authority (TRCA). She oversees environmental planning, development review, policy and environmental assessment functions for the conservation authority within 18 municipalities of the Toronto region. Carolyn discussed ravine management and the role of ravines in creating the TRCA's Living City vision.



Amy Lavender Harris

Amy Lavender Harris is the author of Imagining Toronto (Mansfield Press) and Wild City (forthcoming 2016). She teaches in the Department of Geography at York University and in the Chang School of Continuing Education at Ryerson University. Amy spoke about the intersection of culture and nature in contemporary civic life.

Geoff Cape

Geoff Cape is CEO and founder of Evergreen, with offices in Toronto and Vancouver and a collection of programs focused on action and sustainable cities. Geoff talked about the ravines as a transformation opportunity for the City.





Sabina Ali

Sabina Ali is the Chair and one of the founding members of Thorncliffe Park Women's Committee, a group of local residents who came together with a vision of transforming their public space into a place that builds and enriches the community and their neighbourhood. Sabina shared her experiences working with local youth and engaging the community in Toronto's ravines.

Andrew Chisholm

Andrew Chisholm is an Advisory Director of Goldman Sachs, Andrew was Senior Strategy Officer of the firm, head of the Global Financial Institutions Group in the Investment Banking Division and co-Chairman of the Commitments Committee which oversees the firm's equity underwriting procedures globally. Andrew outlined the opportunities associated with Toronto's ravines from a broad city-building perspective.







Faisal Moola

Dr. Faisal Moola, PhD. Director General. Ontario and Canada's North, David Suzuki Foundation

EW SOUTH FROM CROTHERS WOODS

Protecting and Enhancing the Ravines

The integrity of the ravine system relies on the protection and enhancement of the landform, watercourses, forests and vegetation that form the natural heritage foundation, and on managing the many stresses that impact the natural features and functions. The Roundtable discussion addressed a number of strengths, challenges and opportunities for protecting and enhancing the ravines.

Strengths

Ravines are well protected. The City's land use policies and by-laws work together with the TRCA's Fill Regulation to protect the natural features and functions of ravines.

Challenges

With the City's population expected to grow to 3.4 million people by 2041, there will be increasing pressure on ravines due to increased use, demand for new recreational opportunities and the need to upgrade infrastructure that traverses ravines. There are ongoing impacts from encroachment and dumping of debris on or near slopes. Invasive species and the spread of invasive species are causing serious impacts to the ecological health of natural areas. The potential for climate change to impact the ravine system is significant. Anticipated increases in extreme weather events will result in flooding and erosion which will impact both the natural features and the important infrastructure they contain.

Ravines are an invaluable natural asset and the ecology of the ravines must be front and centre in planning for their future. There is an opportunity to coordinate planned investments in infrastructure so that they also provide opportunities to protect and enhance the ravine system.



What is daunting is the myriad of overlapping responsibilities for these issues and the lack of a comprehensive strategy to guide future use and investment in the ravines.

Opportunities

Connecting People to the Ravines

The panelists explored the challenges and opportunities of connecting people to ravines. Panelist Sabina Ali presented her inspiring work connecting children and teenagers in Thorncliffe Park to their neighbourhood ravine, citing her philosophy to "connect youth and the adults will follow." Panelist Geoff Cape talked about engaging people with nature and the success of the Brick Works, a public private partnership that has transformed the former industrial site into an environmentally focused community and cultural centre.

Strengths

The City's Natural Environment and Community Programs implement ecological restoration projects and trails in Toronto's natural parklands and engage volunteers in stewardship activities to maintain and monitor these naturalization sites. The Community Stewardship Program now involves over 100 dedicated volunteers at upwards of 10 sites. The program is cost effective and the demand for the addition of new sites to the roster each year is high.

Challenges

Many residents are not aware of the vast recreational opportunities offered by ravines or are intimidated by them. Some people, often newcomers, are uncertain about using ravines due to concerns about getting lost or encounters with 'wild' animals. Ravines by their very nature, with steep sided valleys and dense vegetation, are difficult to physically access. Access is not always visible, sometimes hidden behind private development. In many parts of Toronto, there are long stretches of ravine with no access points, or poorly marked entrances. Once down in the valley, directional signage may be missing or infrastructure such as road and rail corridors may present barriers.

Opportunities

Greater awareness of the ravines can be achieved through programs like the Youth Stewardship Program (such as the one used in Thorncliffe Park). There is also an important opportunity to connect to the past through art and interpretive signage showcasing stories of First Nations, industrial heritage, landform and geology. The City has developed a Natural Environment Trail Strategy that is being implemented. A new Wayfinding Strategy is being piloted on the Lower Don River Trail in the fall of 2016 and will eventually be installed throughout the ravine system.

"Get children involved and engaged and they will bring the parents and grandparents along."

Sabina Ali Thorncliffe Park Community Advocate



"Toronto already has the most extensive network of greenspaces in the world in our ravine system. If this doesn't set Toronto apart as a unique and incredible place to live, nothing will."



Celebrate the Ravines

Toronto's ravines set it apart from other cities. They provide places for people to gather and celebrate, act as place-makers and help to define Toronto's identity on the world stage. The Roundtable discussed strengths, challenges and opportunities involved to successfully celebrate Toronto's ravines.

Strenaths

The ravines are a source of inspiration for many Toronto authors and have been celebrated in many writings. As panelist Amy Lavender Harris noted, quoting Robert Fulford in his book Accidental City ", ... The ravines are to Toronto what canals are to Venice, hills are to San Francisco and the Thames River is to London. They are the heart of the City's emotional geography, and understanding Toronto requires an understanding of the ravines." The ravines are also an asset that will help Toronto compete globally. An extensive and accessible green space system contributes to a high quality of life and will help attract people to work and invest in Toronto. As Panelist Geoff Cape points out, "Chicago, New York and other American cities are expanding their existing network of linear green pathways... Toronto already has the most extensive network of greenspaces in the world in our ravine system."

Opportunities

We are at a transition point in the role of ravines in our city. They are already an essential part of our park system. There is an opportunity to create a unified identity for ravines across the City, an opportunity to transition from viewing ravines as sometimes hidden places to realizing their important role in civic life and the many opportunities they provide.



Challenges

While the ravines may be one of Toronto's defining features, in some ways the City has turned its back on them. Roundtable panelist Andrew Chisholm noted that there has been too many unconnected decisions that do not reflect a bold vision for our ravines. Changes made to boosting the ravine system to date have been incremental and ineffective - reflecting a trend, in his words, of 'satisfactory underperformance' - doing just enough to keep the ravines adequate but not enough to make them great and set Toronto apart as a unique and incredible place to live.

Next Steps

The Roundtable on Ravines shone a spotlight on one of Toronto's most valuable natural assets. The Roundtable identified a number of strengths, challenges and opportunities that city builders, regulators and resource managers of these special places need to consider in order to realize their true potential both as resilient natural spaces; as destinations for citizens to enjoy a range of activities in a natural setting; and as a way that Toronto can distinguish itself from other cities. Most of all, the Roundtable emphasized that the ravines are an important part of our city, and if we want to create a truly great city, we need to align our city-building efforts to create a bold vision for the ravines.

There is growing interest in both using and protecting the ravines and in the many important roles ravines perform. City Planning, Parks, Forestry and Recreation and Toronto Water, together with other City Divisions and TRCA, and in consultation with a wide range of stakeholders and the public, are developing a strategy to guide the future use and management of Toronto's ravine system and to identify priorities for investment. The draft Ravine Strategy was released for consultation in June 2016 and the final strategy is expected to be available in early 2017. The draft strategy includes a vision and a set of guiding principles developed through consultation with the public, interest groups, staff and key stakeholders. Five principles — Protect, Invest, Connect, Partner and Celebrate — represent the core ideas and values that will guide the City in future decision-making related to ravine management. The recommendations address the challenges and opportunities in the ravine system and act as catalysts to move the strategic vision forward.

"Changes made to date have been incremental... doing just enough to keep the ravines adequate but not enough to make them great... The Ravine Strategy is a good opportunity to get it right."

Andrew Chisholm

Advisory Director, Goldman Sachs



PLANNING A GREAT CITY TOGETHER



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