

Protection of People and Place: The Role of Conservation Authorities

By Amanda Grant. Photographs by Mike Davis except where noted.

On Oct. 15, 1954, Hurricane Hazel hit Toronto and the surrounding areas, killing 81 people. Thirty-five of these deaths occurred on Raymore Drive, a residential area that was built up in the Humber River floodplain. In the wake of such destruction, the Government of Ontario took a closer look at existing legislation regarding conservation authorities (CAs). Hurricane Hazel helped illustrate why the Conservation Authorities Act was needed, not only to protect lands and animals, but also the human population.

As Hurricane Hazel rolled into Ontario, it was clear that the city of Toronto was ill prepared to deal with a storm of this magnitude. Having already experienced particularly heavy rain, the water levels in Toronto were high. The army was called in to help deal with the hurricane damage, but thousands of people lost their homes in extreme flooding. As a result, today the Ontario Conservation Authority is divided into jurisdictions based on watersheds and has regulations to protect them.

The Conservation Authorities Act was first legislated in 1946 by groups concerned over the health of renewable natural resources in Ontario. In the wake of Hurricane Hazel, greater power was given to CAs. Areas like Raymore Drive had been developed residentially in spite of its location in a floodplain. If this practice was ended, fewer people would be in harm's way. By expanding the power of the CAs,

◀ People enjoying the Niagara Escarpment in April during the annual Hawkwatch at Beamer Memorial Conservation Area, part of Niagara Peninsula Conservation Authority.

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the government allowed them to purchase and take control of lands located in potential flood areas and allowed for regulation and acquiring of lands for recreation.

There are 36 CAs in Ontario, with six located along the Niagara Escarpment. These six stretch from Niagara up to, but not including, the Bruce Peninsula: Niagara Peninsula, Hamilton, Halton, Credit Valley, Nottawasaga Valley and Grey Sauble. All work to protect the environment and human population around the Escarpment and include three of the Great Lakes plus countless rivers, creeks and streams. Boundaries for each CA are based on water flow rather than city and town boundaries. This means that while residents might live in Halton, the land their homes sit on may be part of Credit Valley Conservation Authority (CVCA) because of the direction ground water flows.

The common mandate shared by most CAs is to protect, restore and manage natural resources including waterways and lands, to monitor watersheds and waters for public safety, and to protect ecosystems. To achieve this, the Niagara Escarpment has to be understood.

“The Escarpment plays a major role in our job,” explains Judi Orendorff, Director of Lands and Natural Heritage for CVCA. “It creates different climates which result in unique habitat communities. For example, the Escarpment literally creates a physical barrier in part of the Credit Valley area. You will find different fish in one part of the area than another. It impacts what species live where.”

People Vs. Nature

Chris Hamilton, Community Relations officer with Hamilton Conservation stresses that it takes the community as a whole to protect the environment, and that it’s important to educate the

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Highlights of Conservation Halton

- The Niagara Escarpment is a feature in five of Conservation Halton’s Parks (Crawford Lake, Hilton Falls, Kelso/Glen Eden, Mount Nemo, and Rattlesnake Point) and drew more than 800,000 people in 2012.
- From an ecological standpoint, the Niagara Escarpment within Conservation Halton’s watershed is home to many of Ontario’s species at risk, notably the Jefferson Salamander.
- Conservation Halton spans 1,000 sq. km of land, 17 creeks, approximately 26 km of Lake Ontario shoreline, extensive forest cover and 80 km of the Niagara Escarpment.
- Mandate is to create avenues for sustainable synergy between the natural world and the 511,000 residents that make up the Halton watershed.
- There are significant challenges to overcome and adapt to as we work to protect our natural spaces and ensure that the ecological needs of the environment are met. As we manage these spaces, we have to consider the needs of business and citizens while grappling with stressors that include: climate change, intensified urbanization and growth, pollution, the introduction of non-native invasive species.

Norm Miller,
Communications Advisor,
Conservation Halton

◀ This well-used trail in the popular Inglis Falls Conservation Area, part of Owen Sound’s Grey Sauble Conservation, shows the exposed roots of trees, caused by foot traffic from the roughly 30,000 visitors each year. BY KRISTA MCKEE.

▲ Although the Credit River winds through Halton Hills, which is part of the Region of Halton, it is part of the watershed managed by Credit Valley Conservation Authority, based in Peel Region. CAs have jurisdiction over lands according to how water flows. This is the Credit in March.

In 1954, Hurricane Hazel caused death and destruction in Toronto. To prevent future losses such as these destroyed homes along the Humber River, Conservation Authorities were given control of floodplains.

PHOTO BY MARTIN TAYLOR, TAKEN OCT. 16, 1954, COURTESY OF WIKIMEDIA CREATIVE COMMONS. ►





◀ Even in mid-May, the Singhampton Caves on a Blue Side Trail of the Bruce Trail remain cool enough to retain snow and ice. These caves are in Nottawasaga Bluffs Conservation Area, run by Nottawasaga Valley Conservation Authority.

public in how to help manage conservation areas.

“One of our more difficult issues is to strike a balance between public use and public overuse,” he says. “Trails and natural areas are becoming more and more popular and as our population grows the increase in human traffic to these areas increases as well.”

Krista McKee, Community Relations Coordinator with

Grey Sauble Conservation in Owen Sound, explains that “With the increase in tourism our trails of course receive more wear and tear. There is soil compacting, erosion and tree roots exposed. We have created looped trails in some of our conservation areas in conjunction with the Bruce Trail, as well as built boardwalks and

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As the CA serving the largest urban population in the Niagara Escarpment, Hamilton Conservation Authority has to manage the pressures of human activity and development on nature. Here, the view from the Escarpment shows the Burlington Skyway, left, and the industrial section of Hamilton, right. ▶



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changed trail routes to preserve areas of concern.” McKee points out that Inglis Falls Conservation Area has 30,000 visitors each year, with 25,000 of them in June, July, August and part of September.

Kim Frohlich, an ecologist with Niagara Peninsula

Conservation Halton has Hwy 401 running right through the Escarpment near Milton. This view is from Rattlesnake Point looking across to Mt. Nemo, only two of their seven conservation areas. ▼



▲ From Grey Sauble Conservation's Old Baldy, the view of Beaver Valley is vast, showing few buildings.

Conservation Authority, adds that the larger the population, the bigger the risk is to at-risk species along the Escarpment.

Demands of New Development

“Certainly not unique to Nottawasaga Valley Conservation Authority (NVCA), growth and development pressures are one of the most pressing challenges we face in protecting the watershed and promoting sustainable development,” agrees Heather Kepran, Communications & Public Relations Coordinator for NVCA. “By 2031, more than 100,000 new residents will call the watershed home. NVCA needs to ensure that new development is done with regard to flood and erosion risk, promote environmentally friendly stormwater management to safeguard surface water quality, and be aware that new demand for outdoor recreation may put pressure on natural areas.”

Every day CAs along the Escarpment work to “manage priorities,” Orendorff says.

They ensure the environment functions in a healthy, sustainable way, while allowing the human population in these areas to prosper. The job of the CAs isn't just about protecting land and trees and water, it's the delicate job of fostering the unique species of the Niagara Escarpment while meeting the needs of the population.

From water resource managers, to ecologists, to watershed planners and administration to watershed planners and administration, staff members play an important role in the function of CAs. The public is also encouraged to get involved by volunteering with any of the CAs and contributing to the management of natural resources. Opportunities to plant trees and pull invasive species are offered frequently.

“Be vocal,” adds Hamilton. “Support conservation. Let others know and let your children know. Take your kids or your friends out to a conservation area and experience what you can't get at a city park. Once it's in your blood, you'll never be rid of your love of nature or the outdoors.” **NEV**

Conservation Authorities Along the Niagara Escarpment

- From south to north:**
Niagara Peninsula Conservation Authority (npca.ca)
Hamilton Conservation Authority (conservationhamilton.ca)
Conservation Halton (conservationhalton.ca)
Credit Valley Conservation Authority (creditvalleyca.ca)
Nottawasaga Valley Conservation Authority (nvca.on.ca)
Grey Sauble Conservation (greysauble.on.ca)

In Canada, the Niagara Escarpment continues through Bruce Peninsula and Manitoulin Island, but both areas are without conservation authorities. The Niagara Escarpment comes very close to, but does not appear in, Saugeen Valley Conservation Authority (svca.on.ca).