



*Healthy Hamilton Watersheds*  
*2010 Annual Progress Report*



*Healthy Hamilton Watersheds*  
**ACTION PLAN**

[healthyhamiltonwatersheds.ca](http://healthyhamiltonwatersheds.ca)





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## THE HEALTHY HAMILTON WATERSHEDS ACTION PLAN

The Hamilton Conservation Authority (HCA) is working with local partners and the public to develop and implement stewardship action plans for all fifteen subwatersheds of Spencer Creek. We are developing three plans per year over a five year period (2007-2011). Each year, as the plans are completed, we work together to implement the recommended actions.

We worked together to prioritize which subwatersheds we would focus on first. It was decided that we would start this project in the urban subwatersheds of the creek system, and then we would work our way into the more rural areas in later years. We felt that we should focus our efforts on the most stressed subwatersheds first and then, as the project continued, move our way into the other areas of the watershed.

Following the success of the first four years of the Spencer Creek Stewardship Action Plan project, we have now decided to continue the project in the Stoney/Battlefield Creek and Red Hill Creek watersheds in 2012 and 2013. The project is now called the Healthy Hamilton Watersheds Action Plan to account for the expansion into the other watersheds in the City.

We are working with community partners to develop these action plans that restore and protect the health of the natural environment. The plans are developed using information collected at public open houses and through one-year working groups called Stakeholder Advisory Committees. The Advisory Committees are made up of representatives from local government agencies, non-governmental organizations, industries, businesses and local residents. We work together to identify environmental issues and to develop solutions to improve the health of the natural environment in Hamilton.

Stewardship Actions are the solutions we develop to environmental issues that we identify. They are actions or activities related to education and outreach, learning more about the local ecosystem and restoring the natural environment.

These plans provide us with guidelines for preventing and reversing the impacts of environmental stresses as we work toward improving water quality and quantity, ecological linkages (terrestrial and aquatic), and general environmental stewardship within our watersheds.







## PROGRESS TO DATE

Now, in the fifth year of the project, the Hamilton Conservation Authority, with assistance from numerous partners, is developing action plans for the subwatersheds of Upper Spencer, Fletcher and Flamborough Creeks.

These subwatersheds lie on the table lands of the Niagara Escarpment. They are unique in that they are able to support a variety of different land uses, including: agriculture, residential housing and recreation while at the same time including some of Hamilton's most significant natural areas. As a result, these subwatersheds pose unique challenges with respect to watershed management. For this reason, these subwatersheds are a focus for stewardship action.

## IMPLEMENTATION PROGRESS

The Healthy Hamilton Watersheds Implementation Team has been working together since 2008 to implement the stewardship actions that are developed through the stewardship action planning processes.

We are currently in the public consultation phase of the project. Open houses have been held to request input from local residents and businesses and a Stakeholder Advisory Team has been working together throughout the year to identify environmental issues and develop solutions that take into consideration the varied needs of all interest groups in the area. The draft action plans will be available for comment in January 2012. A public open house will be held to present the findings of the plan to the public and to ask for their input before the final documents are completed.

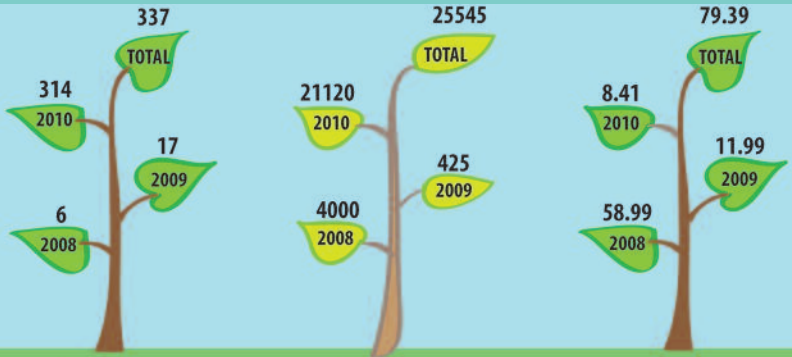


This document highlights some of the many successful projects that were undertaken by the Implementation Team members in 2010 as well as their cumulative progresses since the Team was formed.



# MANY HANDS MAKE LIGHT WORK

## ON THE GROUND

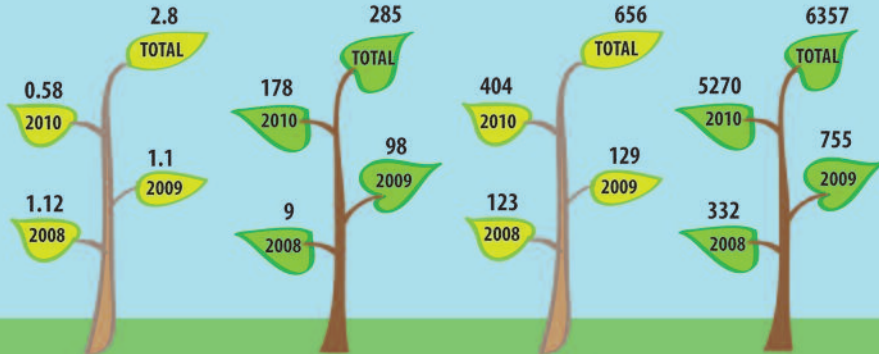


Number of Environmental Restoration Projects Undertaken

Number of Trees and Plants Planted

Acres of Habitat Protected or Restored

## AND IN THE COMMUNITY



Kilometres of in-stream and Riparian Habitat Protected or Restored

Number of Community Events

Number of Youth Groups who Participated in Activities

Number of Citizens who Participated in Activities





## 2010 PROJECT PROFILE HAMILTON GOLF AND COUNTRY CLUB RESTORES THE NATURAL CHANNEL OF ANCASTER CREEK

Working with the Hamilton Conservation Authority and its partners to secure technical and financial assistance, in 2010, the Hamilton Golf and Country Club took an irrigation pond off-line and has restored the natural channel of Ancaster Creek through a portion of the golf course. This project is the result of the Hamilton Golf and Country Club altering their water taking strategy to find alternative water sources to supplement water taking from Ancaster Creek and its tributary.

The eastern tributary of Ancaster Creek was re-aligned to take the existing irrigation pond offline, made possible by the re-opening a decommissioned tributary that is approximately 420 meters (1378 ft) in length. As a result of taking the pond off-line, two issues identified in the Ancaster Creek Stewardship Action Plan will be addressed; barriers to fish migration created by online ponds and the impaired water quality that

occurs downstream as a result of the warming effect that online ponds have on surface water. The creek re-alignment has been designed to optimize fish habitat. The restoration of the natural channel has re-established 870 meters (2854 ft) of fish habitat, allowing fish to migrate further upstream for nesting and spawning. The total length of barrier free fish habitat has increased from approximately 100 to 970 meters (328 ft to 3182 ft) in this reach of the creek. The channel is designed as a pool-riffle watercourse with deep, slow moving areas that are preferred by warm water fish communities. The banks of the new channel are stabilized to prevent erosion and all areas cleared of vegetation were planted with appropriate native species. The Hamilton Golf and Country Club project is a fantastic example of how local businesses work with the partners of the Healthy Hamilton Watersheds Action Plan to improve the natural environment in our community.





## ACTING FOR AGRICULTURE

In 2010, the Hamilton-Halton Watershed Stewardship Program (HHWSP) was able to provide technical and financial assistance to rural landowners in Flamborough for tree planting. An example of one project was the extension of a buffer along the reach of Spencer Creek that passes through one landowner's property. The first project with this landowner was in 2009. It was a planting project completed by a team of volunteers coordinated by the HHWSP. The 2010 planting

project also expanded the wetland on the property. The HHWSP is already planning an additional planting project with these landowners for the 2011 planting season. The HHWSP once again offered its habitat and water quality improvement program in 2010, which provides funding to landowners for the implementation of best management practices on their properties across both Hamilton and Halton Conservation Authorities' watersheds.

## ACTING FOR NATURE

Through partner programs and events this year, 15 habitat restoration projects were undertaken; 21 projects have been undertaken since the project began in 2008. 21,120 trees and wetland plants were planted and a total of 25,545 trees and plants have been planted since the project began. Also, five Wood Duck nest boxes were installed on local properties this year and are being monitored for nesting activity by the landowners; 12 nest boxes have been installed since the project began.

Through the work of the Hamilton-Halton Watershed Stewardship Program, the local residents that work with the program and Royal Botanical Garden's work on its own lands, nearly eight and a half acres of habitat were rehabilitated this year. Seventy-eight and a half acres have been rehabilitated

since the Action Plan project began in 2008. In 2010, Eco-House hosted 42 presentations attended by over 3,600 residents, which showcased pesticide free gardens, gardening with native species, xeriscaping and techniques to reduce pesticide and herbicide use. The presentations also include a clover patch demonstration site; an alternative to traditional lawn grasses. These innovative alternative practices provide healthy habitats for all wildlife and reduce health risks to people and pets that are associated with pesticide and fertilizer use.





## ACTING FOR COMMUNITIES

In 2010, a total of one hundred and seventy eight community events were hosted by members of the Healthy Hamilton Watersheds Implementation Team. Green Venture in particular, hosted one hundred and four tours of Eco House showcasing easy things that people can do to improve environmental practices in the home, including eliminating the use of pesticides and fertilizers, recycling and composting, gardening with native plants, cleaning with environmentally friendly products and many more. Further to community events hosted by our partners, the partners combined, have given fifty-five presentations educating local residents and businesses on the value of and need to protect the natural areas in Hamilton.

Four hundred and four youth groups participated in partner programs in 2010. Green Venture hosted the Wise Water Use program to numerous youth groups while the Bay Area Restoration Council (BARC) hosted its Stream of Dreams™, Classroom Mini Marsh and Yellow Fish Road™ programs to even more students. The City of Hamilton hosted the 3rd annual Children's Water Festival. The City organizes this three day event to educate children on the value of water. Over twenty local partners provide thirty different fun and educational activities for three thousand Grade 4 students over the three days.

The Implementation Team members hosted three workshops in 2010. These workshops are interactive learning forums for local residents and contractors; they offer opportunities for working with experts and networking with other like-minded people.

Workshop topics included building Wood Duck nest boxes, care and maintenance for groundwater wells and septic systems and managing invasive species.

Royal Botanical Gardens (RBG) and the Hamilton-Wentworth Stewardship Council each hosted litter clean up days in 2010 and the Great Canadian Shoreline Clean Up engaged nearly 300 volunteers in litter clean up days at eight different locations on City and Conservation Authority lands. These litter clean up days help keep our natural areas safe and healthy for wildlife as well as providing beautiful spots for residents to engage in outdoor recreation activities.

The Hamilton-Halton Watershed Stewardship Program held its second annual Watershed Stewards Appreciation Day to celebrate 16 years of the Program working with local residents in the Hamilton and Halton areas. They also welcomed two new Watershed Stewards to the program in 2010. Watershed Stewards are rural and urban landowners, who receive awards for agreeing to protect the natural features on their properties and urban Watershed Stewards are given awards for their commitment to environmentally sustainable practices in their urban lifestyles.







## ACTING FOR GROUNDWATER

The Hamilton-Halton Watershed Stewardship Program continued to offer the Ontario Drinking Water Stewardship Program in 2010. The program provides technical and financial assistance to landowners who live near municipal drinking water supplies to assess and improve the condition of groundwater wells and septic systems in order to ensure the safety of that water source for all of the local residents.

The City of Hamilton and Hamilton-Halton Watershed Stewardship Program also partnered to host four public open houses to educate landowners about the importance of protecting our drinking water supply and to promote the technical and financial assistance for projects that is available.

The Stewardship Program provided grants to two landowners to decommission abandoned groundwater wells, eliminating the potential for contaminants to enter the water supply through an uncapped or cracked groundwater well.

Together, in 2010, the City of Hamilton and Green Venture were able to work with homeowners to disconnect 270 downspouts. Disconnecting downspouts allows rainwater to flow onto grassed areas and infiltrate back down into the ground, refilling our groundwater aquifers. This is important to maintain the groundwater table for trees and plants and to maintain base flows in our creeks.







## ACTING FOR SURFACE WATER

The Hamilton-Halton Watershed Stewardship Program was able to negotiate with landowners the restoration of 580 meters of in-stream and riparian habitat along Spencer Creek in 2010. Landowners have restored 2.78 km of in-stream and riparian buffer since the Stewardship Action Plans Project began in 2008. These restored areas are added to the 16 years of restoration work that they have completed in Hamilton's watersheds since their program began in 1994.

In 2010, HCA continued to design the Crooks Hollow Site Remediation Project. Originally built along Spencer Creek in 1913, the dam's purpose was to form a reservoir to provide drinking water for the Town of Dundas. Once a municipal supply was established, the reservoir was no longer used for this purpose. After numerous studies, the dam was deemed unsafe and HCA began researching possible solutions. After much consideration, the decision was made to remove the dam in the interest of public safety. Once the dam is removed, a build up of sediment behind it will be managed, and restoration of Spencer Creek will begin. Restoration plans include a pedestrian walkway or bridge over Spencer Creek at the curtain dam location, and interpretive panels commemorating the dam and its local significance.

In 2010, HCA and numerous other partners began planning for the remediation of the first in a series of eight barriers to fish migration along Lower Spencer Creek in Dundas. The remaining seven barriers will be addressed in 2012 and beyond. The remediation of these barriers is a recommendation from the Hamilton Harbour Fisheries Management Plan. By removing barriers, fish are able to migrate further upstream to

spawning and nesting areas; many fish that live in Cootes Paradise and the Harbour need to be able to swim upstream in our creeks to reproduce. This project will improve the productivity of the fishery in Spencer Creek, Cootes Paradise and ultimately Hamilton Harbour.

The Bay Area Restoration Council hosted eight community work days through their Adopt-a-Creek program in 2010. This program allows corporate, community, and volunteer groups to spend a day in a local creek. Participants help to assess and improve the health of the creek by assisting in litter removal and taking water samples.

In addition to the City of Hamilton's Protective Plumbing Program (3P) which includes Downspout Disconnection and Green Venture's Downspout Disconnection initiatives, various other tools for improving urban stormwater management were showcased at Green Venture's EcoHouse. By improving stormwater management we prevent fast flows in our creeks that cause erosion and sediment build up. We also prevent the overloading of our wastewater treatment facilities in areas of the city where our catchbasins and stormsewers are combined with the sewer system. In these combined sewer areas, rainwater that flows on our roads and in parking lots is sent to the wastewater treatment plant. In 2010, the City continued to increase the storage capacity our stormwater infrastructure to prevent overloading. In 2010, the Conservation Authority developed a Climate Change Strategy that will help to prepare our stormwater management infrastructure for the more severe weather that we are expecting as a result of climate change.





## MONITORING OUR PROGRESS

We will be using the Hamilton Conservation Authority Watershed Report Card to determine our success in improving the natural environment in Hamilton's watersheds. Watershed Report Cards are completed every five years. HCA completed their first report card in 2007 and are currently collecting data for the next report card due to be released in 2012. Grades for the watershed report cards are determined by assessing the health of the watershed in four categories: water quality, land use activities, fisheries and streamside vegetation. Measures of the success of the Healthy Hamilton Watersheds Action Plan will be completed by comparing grades between the report cards every five years.



## WHAT'S NEXT?

Collectively, we accomplished a lot in 2010 – owing to the many people who participated in our programs and services. In 2011, the Healthy Hamilton Watersheds Action Plan Implementation Team will continue to work together and with the people who live and work in Hamilton's watersheds, to protect and enhance our natural environment so that we may all continue to enjoy the benefits of living in a community where nature is all around us. Healthy watersheds contribute to healthy communities.

## CONTACT US

Please visit:  
[www.healthyhamiltonwatersheds.ca](http://www.healthyhamiltonwatersheds.ca)  
or contact any of the partners listed on the back cover of this report to learn about how you can get involved in projects in your community.



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## GET INVOLVED!



Bay Area Restoration Council  
[www.hamiltonharbour.ca](http://www.hamiltonharbour.ca)  
Contact: Kelly Pike (905) 527-7111



City of Hamilton  
[www.hamilton.ca](http://www.hamilton.ca)  
(905) 546-2489



Green Venture  
[www.greenventure.ca](http://www.greenventure.ca)  
Contact: Kathryn Gold (905) 540-8787



Hamilton Conservation Authority  
[www.conservationhamilton.ca](http://www.conservationhamilton.ca)  
Contact: Jaime Overy (905) 525-2181



Hamilton-Halton  
Watershed Stewardship Program  
[www.conservationhamilton.ca](http://www.conservationhamilton.ca)  
Contact: Cherish Elwell (905) 525-2181



Hamilton-Wentworth stewardship Council  
[www.ontariostewardship.org](http://www.ontariostewardship.org)  
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Royal Botanical Gardens  
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