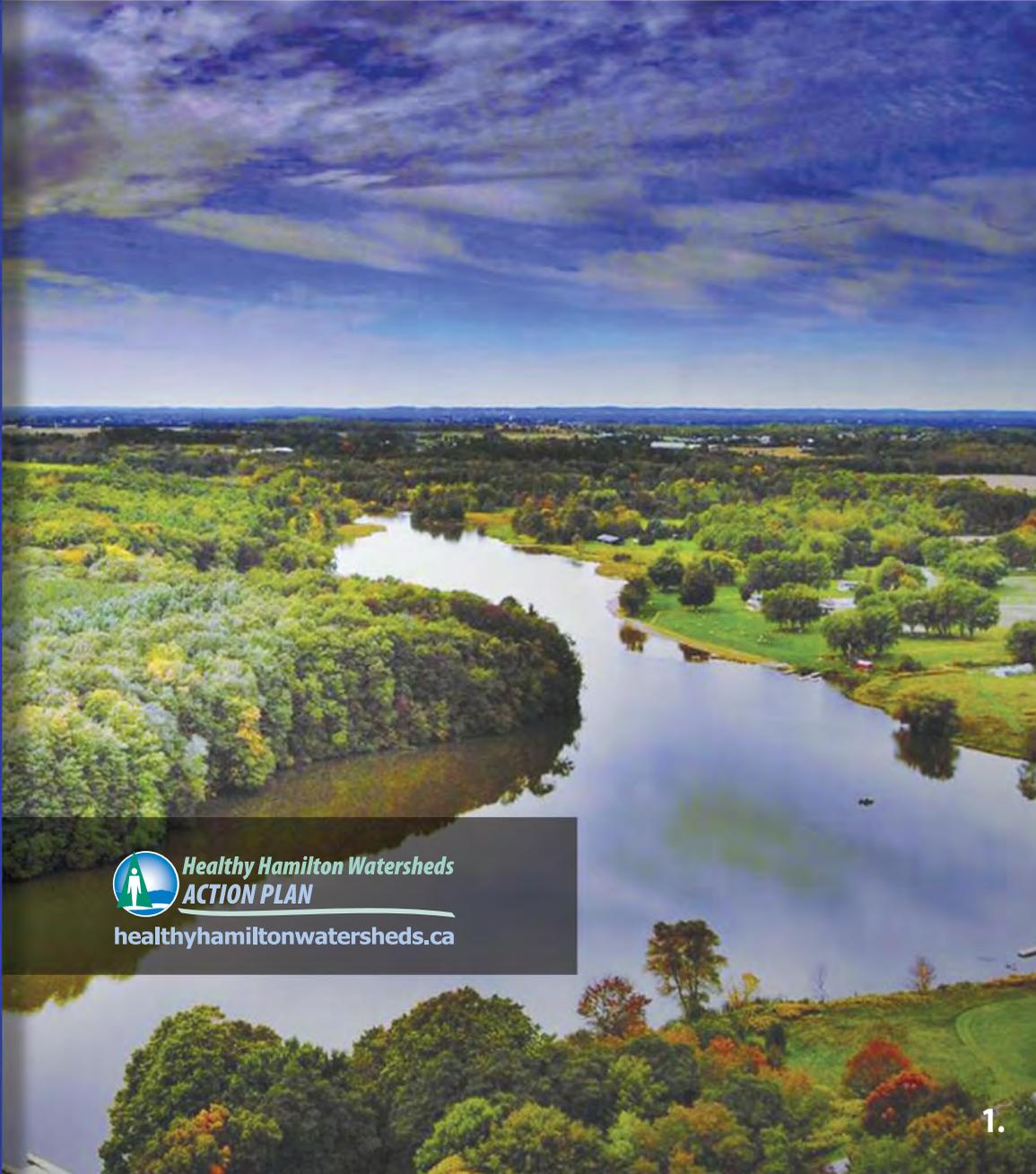


Healthy Hamilton Watersheds 2011 Annual Progress Report



Healthy Hamilton Watersheds
ACTION PLAN

healthyhamiltonwatersheds.ca



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THE HEALTHY HAMILTON WATERSHEDS ACTION PLAN

The Hamilton Conservation Authority 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.

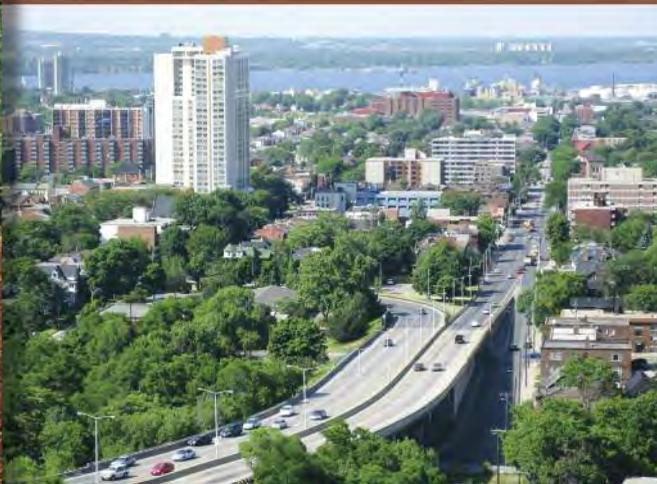
In 2006, we worked together to prioritize which subwatersheds we would focus on first and decided to start this project in the urban subwatersheds of the creek system. We would then we would work our way into the more rural areas in later years. We felt that we should focus our efforts on the more stressed subwatersheds first and then, as the project continued, move our way into the other areas of the watershed.

Following the success of the Spencer Creek Stewardship Action Plan project, we are continuing the project in the Red Hill Creek, Stoney/Battlefield Creek and Stoney Creek Numbered Watercourses watersheds, beginning in 2012.

We are working with community partners to develop these stewardship action plans to 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 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.

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 sixth year of the project, the Hamilton Conservation Authority, with assistance from numerous partners, is developing action plans for the subwatersheds of Green Hill, Hannon, Upper Davis and Upper Ottawa 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: residential housing, commercial and industrial operations 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 have been identified as a priority for stewardship action.

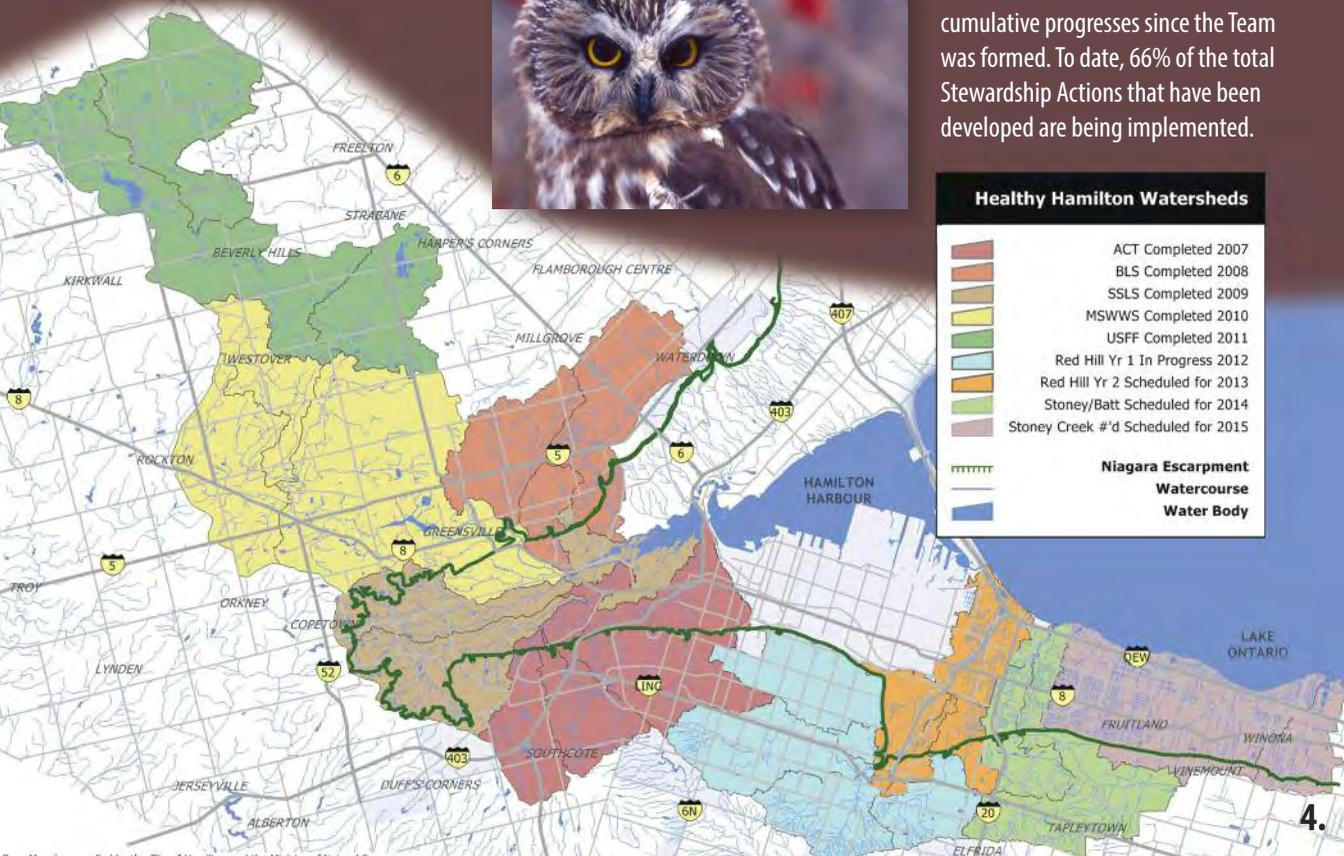
We are currently in the plan development phase of the project. Open houses were held to request input from local residents and businesses and a Stakeholder Advisory Team has been working together throughout the year to identify environmental issues and develop solutions that take into consideration the varied needs of all interest groups in the area. The draft action plans were made available for comment in August 2013. A public open house was also held to present the findings of the plan to the public and to ask for their input before the final documents are completed.



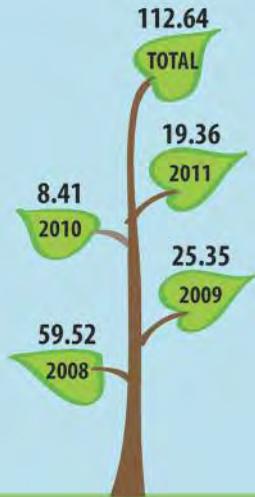
IMPLEMENTATION PROGRESS

The Healthy Hamilton Watersheds Implementation Team is made up of stakeholders who were involved in the development of the stewardship action plans. They have been working together since 2008 to implement the stewardship actions that are developed through the stewardship action planning processes.

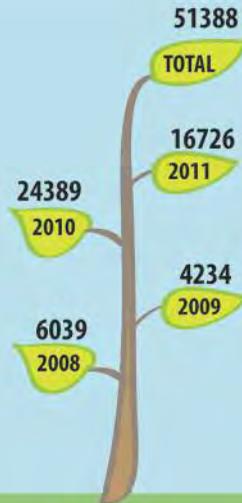
In 2011, 58% of the 238 Stewardship Actions that have been developed to date were being implemented. This document highlights some of the many successful projects that were undertaken by the Implementation Team members in 2011 as well as their cumulative progresses since the Team was formed. To date, 66% of the total Stewardship Actions that have been developed are being implemented.



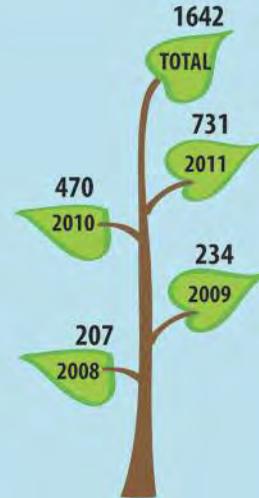
MANY HANDS MAKE LIGHT WORK



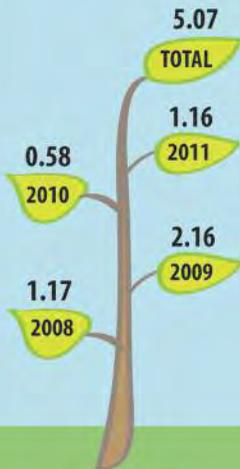
Acres of Habitat Improved or Protected



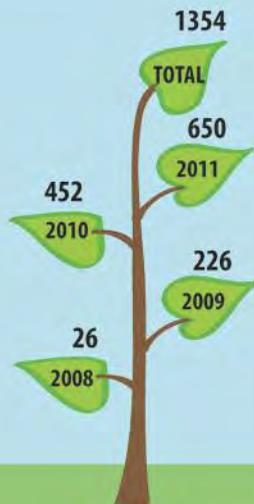
Number of Trees and Plants Planted



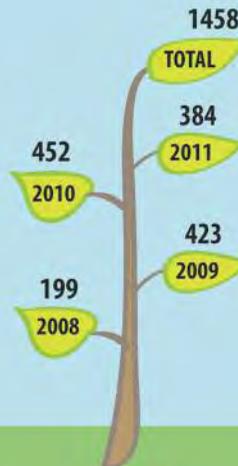
Number of Environmental Rehabilitation Projects Undertaken



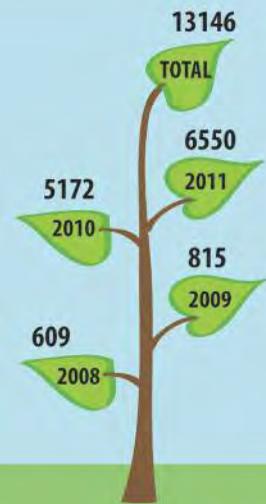
Kilometres of Instream and Riparian Habitat Improved or Protected



Number of Community Events



Number of Youth Groups Participated in Activities



Number of Citizens who Participated in Activities

2011 PROJECT PROFILE Spencer Creek Barrier Remediation Project

The Spencer Creek Barrier Remediation project arose from recommendations within the Hamilton Harbour Watershed Fisheries Management Plan. The Plan recommended removal of fish passage barriers in order to improve the productive capacity of the fishery in the Hamilton Harbour Area of Concern. To carry out this recommendation, Hamilton Conservation Authority partnered with the Ministry of Natural Resources and Ontario Streams to initiate a Class

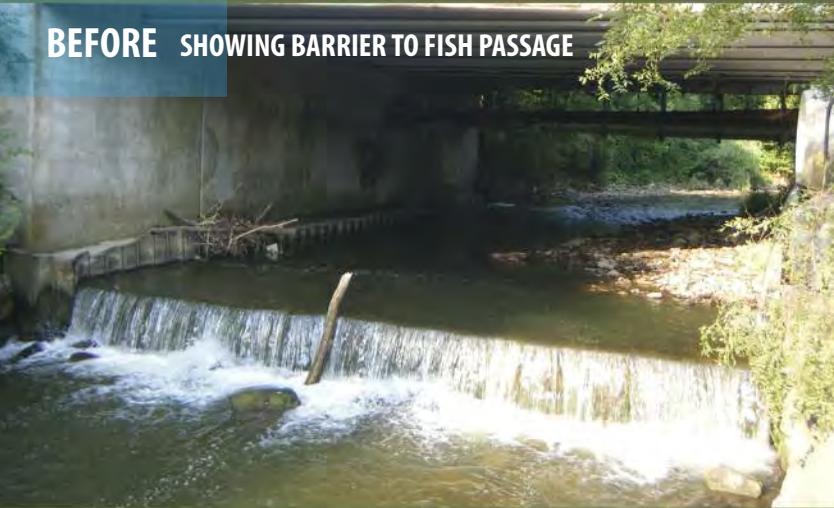
Environmental Assessment (EA) to assess a sequence of nine identified barriers on Spencer Creek below the Niagara Escarpment. The first barrier in this sequence, the weir under the Osler Drive Bridge, was screened out of the Class EA as a low-risk project, meaning that no further environmental assessment work needed to be completed in order to proceed with the project. There are eight additional barriers in Spencer Creek below the escarpment

which will be dealt with in a larger Class EA that will address the barriers in greater detail. It is anticipated that the recommendations of this Class EA, when carried out, will lead to the enhancement of the long-term sustainability of the fish populations in Spencer Creek and Hamilton Harbour.

In mid July 2011, HCA along with its partners began the mitigation work on the Osler Drive barrier to allow for fish passage and allow natural recolonization within Spencer creek. Prior to this, the Osler Drive barrier limited the extent of Spencer Creek that could be reached by various fish. Mitigation works completed at the Osler Drive barrier included notching of sheet pile weirs that stretch across the creek and the installation of “rocky ramp” structures. The notching of the weirs and installation of the rocky ramps provide natural riffle-pool features that various fish species can now utilize to reach available upstream habitats.

The work took place over a two week period. Measures were put in place to protect the natural environment including: sediment and erosion controls, controlled staging and access for construction equipment, and fish rescues and transfers as needed. HCA completed all necessary permit approvals and were onsite with partners during the construction and mitigation process to ensure no negative impacts on the surrounding environment occurred. Continued ecological monitoring is planned for subsequent years to assess the effectiveness of the project.

BEFORE SHOWING BARRIER TO FISH PASSAGE



AFTER SHOWING BARRIER REMOVED



ACTING FOR AGRICULTURE

In 2011, the Hamilton-Halton Watershed Stewardship Program (HHWSP) was able to provide technical and financial assistance to rural landowners in Flamborough for a number of tree planting and habitat enhancement projects. An example of one project was the widening of a riparian buffer along Spencer Creek. HHWSP had worked with this landowner in 2009 and 2010 to undertake plantings in earlier phases of this larger project. These plantings also expanded the wetland on the property. In 2009, the

landowners completed the planting themselves. In 2010, the planting project was completed by a team of volunteers coordinated by the HHWSP.

The HHWSP continued to offer the habitat and water quality improvement program in 2011, 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, 731 environmental rehabilitation projects were undertaken; 1642 projects have been undertaken since the project began in 2008. 16,726 trees and wetland plants were planted and a total of 51,388 trees and plants have been planted 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, over nineteen acres of habitat were rehabilitated this year. Ninety-eight and a half acres have been rehabilitated since the Action Plan project began in 2008. In 2011, Eco-House hosted 57 presentations attended by

over 1,600 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 2011, a total of six hundred and forty nine community events were hosted by members of the Healthy Hamilton Watersheds Implementation Team. Green Venture in particular, hosted seventy three 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 seventy-seven presentations educating local residents and businesses on the value of and need to protect the natural areas in Hamilton.

Three hundred and eighty-four youth groups participated in partner programs in 2011. 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 4th 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 fifty-nine workshops in 2011. 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, Caring for Your Horse and Farm, designing rain gardens and installing permeable pavement.

Royal Botanical Gardens (RBG) and the City of Hamilton each hosted litter clean up days in 2011. Over 200 litter clean up events were held in 2011 through the City of Hamilton. The Great Canadian Shoreline Clean Up also annually engages volunteers in litter clean up days at numerous 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 third annual Watershed Stewards Appreciation Day to celebrate 17 years of the Program working with local residents in the Hamilton and Halton areas. They also welcomed two new Hamilton Watershed Stewards to the program in 2011. 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 2011. 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 mail letters to residents in drinking water well head protection areas to educate these 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 a grant to a local landowner to decommission an abandoned groundwater well, eliminating the potential for contaminants to enter the water supply through an uncapped or cracked groundwater well.

Together, in 2011, the City of Hamilton and Green Venture were able to work with homeowners to disconnect 9 downspouts from the storm sewer system. 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 1.16 kilometers of in-stream and riparian habitat along Spencer Creek in 2011. Landowners have restored 5.05 km of in-stream and riparian buffer since the Stewardship Action Plans Project began in 2008. These restored areas are added to the 17 years of restoration work that they have completed in Hamilton's watersheds since their program began in 1994.

The Bay Area Restoration Council hosted six community work days through their Adopt-a-Creek program in 2011. 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 Green Venture's Downspout Disconnection initiative, 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 2011, the Conservation Authority began to implement strategies for mitigating and adapting to climate change that will help to build resiliency in our natural and built stormwater management infrastructure to help to withstand the impacts of a changing climate.





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 five categories: surface water quality, impervious surfaces, wetlands and forest conditions, and streamside vegetation. Measures of the success of the Healthy Hamilton Watersheds Action Plan will be evaluated through the grades determined for the report cards every five years.



WHAT'S NEXT?

Collectively, we accomplished a lot in 2011 – owing to the many people who participated in our programs and services. In 2012, 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 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.



Healthy Hamilton Watersheds
ACTION PLAN

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GET INVOLVED!



BAY AREA
RESTORATION
COUNCIL

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



Hamilton

City of Hamilton
www.hamilton.ca
(905) 546-2489



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



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



Hamilton-Halton
Watershed Stewardship Program

Hamilton-Halton
Watershed Stewardship Program
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ROYAL
BOTANICAL
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