



BACKGROUNDER **September 2009** **BURLINGTON BLUECREEKS PROJECT**

The Burlington BlueCreeks Project will improve water quality and riparian habitat in Grindstone Creek and its tributaries in Burlington. The project will provide a number of different ways for the community to get involved and contribute to caring for our precious water resources.

The Burlington BlueCreeks Project is a community partnership inspired by the Burlington Community Foundation; the partner organizations are Conservation Halton, the Hamilton-Halton Watershed Stewardship Program, Conservation Halton Foundation, the Bay Area Restoration Council and the Royal Botanical Gardens.

All of these local environmental organizations have been working with the local community to improve water quality and habitat around the Grindstone Creek, and in the Burlington area, as part of their mission. Burlington BlueCreeks projects are being funded by the Burlington Community Foundation and will improve the health of Grindstone Creek through community projects and education. A number of projects to improve water quality, wildlife habitat and to clean up Grindstone Creek are being started in fall 2009.

The BlueCreeks project is guided by Conservation Halton's Grindstone Creek Watershed Study – Our Legacy to Value. This study, which identifies specific opportunities for water quality and habitat improvements in the watershed, was created by a number of Burlington community stakeholders, which included the BlueCreeks Project partners, government, landowners and business.

Burlington BlueCreeks Projects

The Grindstone Creek study identified a number of specific actions. To get the Burlington BlueCreeks Project off to a quick start, the project partners propose a phased approach. Phase 1 of the Burlington BlueCreeks project is focused on community awareness and involves four main projects that will be undertaken by the partners along the Grindstone.

- Adopt-a-Creek
- Invasive plant removal
- Expanding riparian (streamside) buffers
- Turtle tracking

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Project 1: Adopt-a-Creek Expansion

Building on its work on the Grindstone tributary 'E-1' (which joins the main branch of Grindstone Creek in Hidden Valley Park) with CUMIS, BARC will add a second segment in the lower Grindstone on publicly-accessible property. Volunteers will remove trash from the waterway and undertake water quality tests to understand the health of the watercourse.

Project 2: Expanding Riparian (Streamside) Buffers

Building on the work on Grindstone tributary 'E-1', HHWSP will undertake initial riparian buffer expansion in this area through plantings of appropriate native tree, shrub and/or herbaceous plant species.

Additional analysis will be conducted to identify other publicly accessible areas that may be in need of riparian buffer enhancement. While improvements on public property are important, HHWSP will also work to identify other opportunities on private property for riparian buffer establishment or improvement, especially where no riparian buffers exist or where very narrow riparian buffers exist. Creating a buffer is as easy as setting aside a "no mow zone" beside the creek. HHWSP has funding to assist landowners with the cost of plant material to kickstart their riparian buffer. Landowners that the HHWSP has worked with are often pleasantly surprised with the richness and life that a buffer brings to a creek. Landowners experience an increased level of enjoyment of their property and take pride in owning a well buffered creek. All landowners play a critical role in improving the health of Grindstone Creek.

Project 3: Invasive Species Removal at the mouth of the Grindstone

RBG's Carroll's Bay Marsh/Hendrie Valley Sanctuary (the rivermouth marshes and valley at the mouth of Grindstone Creek) protects 110 hectares of land, including 30 hectares of woodlands and 80 hectares of wetlands and several endangered species. The valley is a critical corridor for migratory birds and a remarkable repository of biodiversity and endangered species. Its long term health relies on the Grindstone watershed's health and the communities' connection to it.

Through this project, we will remove large quantities of introduced invasive species from the Sanctuary. High on the list are the common carp, garlic mustard, honeysuckle and buckthorn. Removal of these species will preserve remaining valley biodiversity and reinvigorate the damaged habitats.

Project 4: Turtle tracking at the mouth of the Grindstone

The marshes in the Hendrie Valley Sanctuary are the only remaining site in Burlington region for two endangered species – the Northern Map turtle and the Blandings Turtle. There are less than five Blandings turtles left in the area.

These two turtles are ideal indicators of watershed health as they live in the waters at the mouth of the watershed, and use adjacent woodlands for nesting. While a combination of watershed issues and introduced species has generally degraded these areas, there may be additional site specific issues contributing to the situation. Radio tracking of individuals over a year will identify specific patterns of movement, priority locations used by the remaining turtles, and nesting sites. The nests will subsequently be protected from predators. All permits required will be coordinated through the Ministry of Natural Resources which is anticipated to contribute complementary funding.

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Portions of the turtles' marsh habitat are being restored through site specific actions centered on carp exclusion. Within the woodlands non-native shrubs have invaded and now dominate portions of the understory. Their removal, critical to preserving the woodland ecosystem integrity, is a goal of national and provincial biodiversity strategies. Our goal is to ultimately eliminate all invasive shrubs species (more than 5,000), from the sanctuary using a combination of contract staff and volunteers.

Background on Project Partners:

The Bay Area Restoration Council is a community group dedicated to the restoration of Hamilton Harbour/Burlington Bay and its watershed. Much of this watershed lies within the City of Burlington. BARC acts as the communication arm of the Remedial Action Plan, it also monitors and reports on the progress of the restoration.

Phone: 905-527-7111

Website: www.hamiltonharbour.ca

Since 1999, the **Burlington Community Foundation** has worked with donors in our community to build endowed funds that support important projects in our community. Since its inception, the BCF has made grants totaling \$800,000 to support projects in our community.

Phone: 905-639-0744

Website: www.burlingtonfoundation.org

Conservation Halton is the community based environmental agency that protects, restores and manages the natural resources in the Halton watershed. Our staff includes ecologists, land use planners, engineers, foresters and educators along with a network of volunteers. **The**

Conservation Halton Foundation raises funds for Conservation Halton projects and programs.

Phone: 905-336-1158

Website: www.conservationhalton.ca

The Hamilton-Halton Watershed Stewardship Program (HHWSP) is a partnership of the Hamilton Conservation Authority, Conservation Halton and the Bay Area Restoration Council. For 15 years the HHWSP has been working one-on-one with watershed landowners. The HHWSP helps landowners to understand the important role they have to play in protecting natural areas, like forest, meadows, wetlands, as well as surface and ground water. Exemplary Watershed Stewards are recognized through the HHWSP's award program. Financial assistance is available to assist landowners with the cost of eligible and approved water quality and habitat improvement projects.

Phone: 905-648-4427 or 905-525-2181 Ext. 164

Website: www.conservationhamilton.ca or www.conservationhalton.ca

The **Royal Botanical Gardens** features over 2,700 acres of breathtaking gardens and spectacular nature sanctuaries, including the rivermouth and lower three kilometres of the Grindstone Creek Valley. The RBG acts as a living museum which serves local, regional and global communities while developing and promoting public understanding of the relationship between the plant world, humanity and the rest of nature.

Phone: 905-527-1158

Website: www.rbg.ca

About Grindstone Creek

Grindstone Creek is one of five creeks within the Hamilton Harbour / Burlington Bay watershed. Shaped by glaciers, its watershed is approximately 90 square kilometers in size. Its headwaters originate near Harpers Corners in north Flamborough, traverses the Niagara Escarpment near

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Waterdown, winds through Hidden Valley in Burlington before emptying into Hamilton Harbour / Burlington Bay. It carries about 14% of the natural water that flows into Hamilton Harbour / Burlington Bay.

The Grindstone watershed falls within the northernmost limit of the Carolinian Forest Zone in Southern Ontario. It includes the greatest diversity of wildlife of any Carolinian Forest Zone, including species found nowhere else in Canada.

Grindstone Creek was once a powerful and pristine waterway that supported a thriving milling industry in Waterdown, filled with fish and wildlife, Entering Lake Ontario at the western tip, the lower creek and marshes provided one of the most significant Lake Ontario fish nurseries and migratory bird stopovers of the region. Over the years, changes to the Grindstone, including dam building, tree cutting, wetland filling, urbanization and introduced species have all contributed to its decline. At its lowest, the Grindstone lacked enough water to fight a 1922 fire that ravaged Waterdown.

In the 90 years since, improvements have come in fits and starts. In the 1940's, the Royal Botanical Gardens was established as a wildlife sanctuary, a sewage plant was built in Waterdown, natural areas were protected by the provincial government, conservation authorities and municipal plans, and the Niagara Escarpment was designated a "World Biosphere Reserve". In the 1990's, a Remedial Action Plan was developed for the restoration of Hamilton Harbour / Burlington Bay.

However, overall it remains among the higher quality creeks of Lake Ontario, and with some focused stewardship, guided by Conservation Halton's Grindstone Creek Watershed Study the creek can be reinvigorated.

Conservation Halton's Public Accountability Report 2008 indicates steady progress on implementing the Grindstone Creek Watershed Study recommendations from 2005 to 2007 with 34% complete. The Burlington BlueCreeks Project will increase the pace of completing action within this plan.

Get Involved

How can you get involved? There are a number of different ways;

Get your feet wet – volunteer at an event or participate in a workshop

Stewardship - If you're a landowner along the Grindstone Creek or one its tributaries, you can contact the Hamilton-Halton Watershed Stewardship Program (HHWSP) for suggestions on how to create a riparian buffer to protect the creek.

Contribute - For more information on how you can support this project, please contact either:

- Cheryl Taylor, Executive Director at the Burlington Community Foundation at (905) 639-0744 or by email at ctaylor@burlingtonfoundation.org
- Brian Hobbs, Director – Development, at The Conservation Halton Foundation at (905) 336-1158 extension 255 or by email at bhobbs@hrca.on.ca

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