

# Living by the Lake

LAKE ONTARIO INTEGRATED SHORELINE STRATEGY - RESIDENTS' NEWSLETTER - ISSUE ONE



*Left: Jeanne McRight's home on Cooksville Creek, where she planted many trees and shrubs.*

*Below: Jeanne receiving a CVC conservation award, with Brampton Councillor John Hutton (left) and Mississauga Councillor Jim Tovey (right).*



## BACKGROUND

*Lake Ontario* quenches our thirst, sustains our food supply, and soothes our soul with its natural beauty. The Great Lakes region represents one-fifth of the world's freshwater supply and is home to more than 200 rare plants and animals, including 40 species found nowhere else in the world.

although industrial and urban development may dominate parts of the landscape, the shoreline teems with life.

**Local residents play an important role** in restoring and protecting the vibrant shoreline ecosystem. By partnering with Credit Valley Conservation (CVC), a growing number of residents are doing their part for the local community and demonstrating their commitment to their local environment.

## STUDYING THE SHORELINE

CVC's multi-year study of the shoreline, *the Lake Ontario Integrated Shoreline Strategy (LOISS)*, will assist CVC, other agencies and the local community in better understanding the natural heritage of our lake and shoreline.

Once complete, it will provide clear guidance and steps we need to take as a community to protect and enhance the health of our shoreline.

## JEANNE McRIGHT

### *Leading the Way Towards a Greener Community*

In the spring of 2011, Jeanne McRight brought together several households in Mississauga's Mineola Gardens neighbourhood to help restore native habitat on their private residential properties along Cooksville Creek, a tributary of Lake Ontario. With resources and guidance from CVC, Jeanne organized the planting of native species for approximately one square kilometre of residential properties along the creek.

On her own property, Jeanne and her husband Wayne Cardinalli have been actively removing invasive species and planting native species for five years. She has also been involved in other volunteer work to protect creek health.

With Jeanne's efforts, the number of native species along Cooksville Creek is increasing. In a highly urban area, these efforts contribute to providing green corridors for wildlife, improving aquatic habitat, increasing native biodiversity, and demonstrating ecological practices to neighbours and local creek users.

Jeanne's neighbourhood leadership is an excellent example of volunteer stewardship in the city.

## LOISS BACKGROUND SUMMARY AND DATA GAP ANALYSIS REPORT

CVC is currently focusing on research to determine existing environmental conditions along the Lake Ontario shoreline within the City of Mississauga as part of the *Lake Ontario Integrated Shoreline Strategy (LOISS)*. This is known as the *Characterization and Impact Analysis* phase.

A review of existing reports and data as well as historical aerial photography was compiled in the Data Gap Analysis portion of the report. This list will be the basis for the LOISS work plan over the next few years. The *Background Summary and Data Gap Analysis* report and associated appendices are available at [www.creditvalleyca.ca/loiss](http://www.creditvalleyca.ca/loiss).

## REPORT HIGHLIGHTS

### Habitat

- Seventy eight per cent of the shoreline within the LOISS study area is unnatural, consisting of revetments, walls, rubble, artificial beaches, riprap and other materials.
- Less than a quarter of the study area has natural cover.
- There are historical and recent records of 12 amphibian species, 2145 bird species, 30 mammal species, 13 reptile species, and 55 fish species.

### Invasive and Non-Native Species

- Invasive species identified in the LOISS study area include: alewife, common carp, rainbow smelt, white perch, round goby, zebra and quagga mussels, fish hook and spiny waterflea, rusty crayfish, bloody red shrimp, yellow floating heart, Eurasian milfoil, curly-leaved pondweed, European frogbit, fanwort, flowering rush, purple loosestrife and more.

### Water Quality

- The Credit River is the largest contributor of phosphorous on the Canadian side of Lake Ontario.
- Efforts to reduce phosphorous have resulted in decreased phosphorous levels.
- Quagga and zebra mussels may be the cause of cycling a specific form of phosphorus that is increasing algae in the nearshore area.

### Water Quantity

- Applewood, Turtle, and Lakeside Creeks all exhibit backwater effects from Lake Ontario.
- Lake Ontario's water levels are controlled at the Moses-Saunders Dam near Brockville, reducing the natural fluctuation of water levels and resulting in backwater effects. Changes to the management of water level controls are currently being considered.

## LOISS COMMUNITY SESSION

### Lorne Park Estates

On Wednesday March 21, 2012 CVC held a community session to discuss LOISS with members of the Lorne Park Estates community. Presentations were delivered by representatives from CVC, the City of Mississauga and the Region of Peel. This was followed by an in-depth discussion of the environmental concerns specific to the Lorne Park Estates community.



*CVC staff presenting to members of the Lorne Park Estates community.*

Attendees indicated an interest in learning about enhancements they can make to their properties, such as planting native trees and shrubs and constructing rain gardens to help manage stormwater runoff. CVC was very encouraged by the enthusiasm and environmental knowledge of the Lorne Park Estates' residents and is looking forward to continuing dialogue with them.

## Interested in organizing your own neighbourhood planting?

CVC can help! Recruit some neighbours and contact us. For details visit: [www.creditvalleyca.ca/weplant](http://www.creditvalleyca.ca/weplant)

## LAKEVIEW GREEN STREETS PROJECT

### *The First of its Kind in Ontario*

The City of Mississauga and CVC partnered to develop a *Green Street* pilot project for two streets in the Lakeview district of Mississauga. The City of Mississauga took an environmental approach toward road rehabilitation by incorporating Low Impact Development (LID) practices which are cost effective, environmentally beneficial, visually appealing and preferred by many residents.

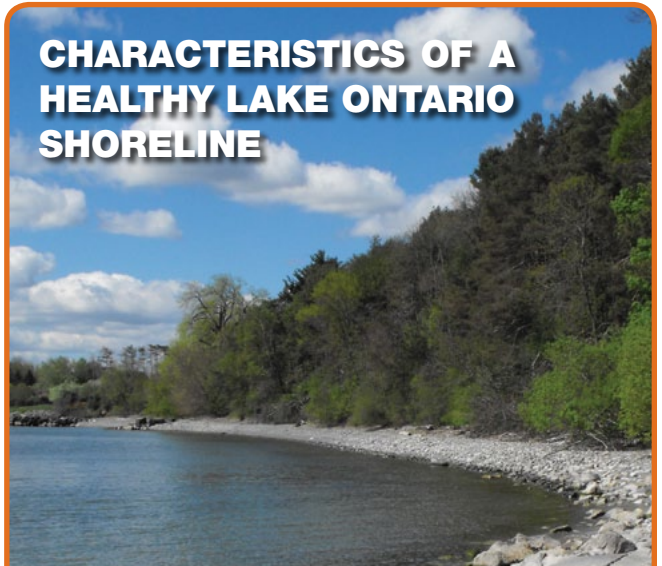
Instead of converting neighbourhood streets to a curb and gutter system with a buried stormsewer, the City of Mississauga will enhance roadside swales with plants and soil that use natural processes to treat and clean stormwater runoff and promote the slow release of runoff into the ground. The redevelopment encompasses 260 meters of residential street and will improve water quality discharging into storm sewers and eventually Lake Ontario.

The project is currently under construction. Residents gathered together on April 15, 2012 to launch the project. Construction is anticipated to be completed by fall of 2012.



*Conceptual drawing of the LID retrofit at Lakeview.*

## CHARACTERISTICS OF A HEALTHY LAKE ONTARIO SHORELINE



*What constitutes a healthy shoreline?* There are a number of factors that contribute to healthy shoreline ecosystems. Not all areas of the shoreline are alike. Some areas have sandy or cobble beaches, while other areas have wetlands or forests growing right up to the shore. However, there are universal features that are clear signs of shoreline health.

### *The Shoreline (land next to water)*

- Must have natural shoreline materials (sand, silt, clay, gravel, cobble)
- Must have native vegetation
- Must have natural landforms (bluffs, beaches)
- Should have high biodiversity of animals (birds, bats, insects, mammals, reptiles, amphibians)

### *The Nearshore (water next to land)*

- Should have high biodiversity of warmwater fish species (Walleye, Yellow Perch, Small and Large Bass, Northern Pike, Sunfish species, American Eel, Lake Sturgeon, Round Whitefish)
- Must have natural substrates (sand, cobble, shale, gravel, boulders)
- Should have areas of native aquatic vegetation
- Must have natural erosion and sediment transport
- Could have fallen trees and other woody material
- Should have abundant water insects

View a video of artist and environmentalist Robert Bateman on the importance of the Lake Ontario shoreline at:

[www.creditvalleyca.ca/loissvideo](http://www.creditvalleyca.ca/loissvideo)

## LAKEVIEW WATERFRONT CONNECTION

The Lakeview Waterfront Connection project (LWC) seeks to improve a highly degraded area of the eastern Mississauga Waterfront by creating new aquatic and terrestrial habitats and linkages, while providing access and recreation opportunities for the public. The proponents propose to use an innovative funding approach that seeks to maximize public benefit and value by reusing locally-generated fill from the Region of Peel's and the City of Mississauga's existing 10-year capital works projects and budgets to create this new natural space.

This project envisions creation of vital coastal habitat and public trails to and along the waterfront, as well as new beaches, meadows, forests and wetlands. Visitors could potentially swim, fish, canoe/kayak, bird watch, picnic or simply enjoy the view of Lake Ontario from the Mississauga shoreline.

The Lakeview Waterfront Connection is being funded and overseen by the Region of Peel, and is led by CVC with assistance from the Toronto and Region Conservation Authority. The project is being fully coordinated with the City of Mississauga's *Inspiration Lakeview* initiative.

([www.mississauga.ca/portal/residents/inspirationlakeview](http://www.mississauga.ca/portal/residents/inspirationlakeview))

The first phase in this multi-year project is an environmental assessment led by CVC. The public is encouraged to provide feedback on the project. Please visit [www.creditvalleyca.ca/lwc](http://www.creditvalleyca.ca/lwc) for more information and to find out how you can get involved.



*Proposed site of the Lakeview Waterfront Connection*

### WHAT CAN YOU DO?

- Reduce the use of road salt, pesticides and fertilizers which make their way to the lake through groundwater and storm sewers.
- Choose native species for your landscaping projects and reduce lawn space in favour of more natural landscaping.
- Improve the ability of rainwater to soak into the ground by using permeable pavement, reducing paved spaces and where appropriate, routing downspouts into the garden.
- Get involved. Make sure your local, provincial and federal elected officials know you care about protecting the shoreline.



For more information visit: [www.creditvalleyca.ca](http://www.creditvalleyca.ca) or contact:

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