



**Restoring natural diversity by ripping up concrete and asphalt and replacing it with soil and vegetation**

July 11, 2013

By Kathryn Gold, M.E.S.

Green Venture

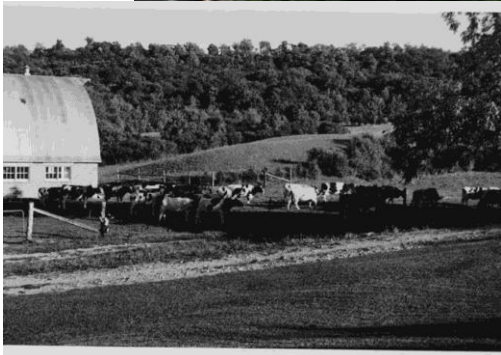


Green Venture is a community-based, non-profit organization committed to promoting energy efficiency, pollution prevention, and resource conservation.

Every year we engage up to 20,000 individuals.







Green Venture's EcoHouse is located in a 150-year-old home & welcomes 3,000-4,000 visitors every year.



**Green Communities**  
CANADA

- national association
- share information & inspiration
- build capacity
- joint programs

Positive action today  
for a green and healthy future



2010  
ANNUAL  
REPORT

**Green Communities**  
CANADA

15<sup>TH</sup> ANNIVERSARY 1995-2010  
[www.greencommunitiescanada.org](http://www.greencommunitiescanada.org)

Green Venture





- Hands-on engagement in 9 communities
- “Slow it down. Soak it up. Keep it clean”
- Rain gardens (0.5 hectares)
- Workshops: Rain barrels, rain gardens, permeable pavement, dog waste
- 7121 m<sup>3</sup>
- 160 media hits



# The Problem: Stormwater Runoff



- Infiltration is limited
- Runoff picks up pollutants and carries them to nearest water body



Source: [waterfrontoronto.ca](http://waterfrontoronto.ca)





# Combined Sewer Overflows

Green Venture



Toronto  
Source: XCG Consultants



New York  
Source: deeproot.com





# Flooding in Hamilton: July 26, 2009



Source: Hamilton Spectator





# The Solution: **RAIN**

Slow it Down, Soak it Up, Keep it Clean

Think about the amount of water.

Where will the water go?

What does it pick up along the way?



[lifefm.com.au](http://lifefm.com.au)



[www.telegraph.co.uk](http://www.telegraph.co.uk)



- Hands-on engagement
- Removing unwanted pavement
- Currently in 5 communities – Kingston, Toronto, Hamilton, Collingwood, North Bay



# Depave Hamilton



**BEFORE**

Green Venture removed 93m<sup>2</sup> at a local elementary school, allowing 83m<sup>3</sup> (~83,000 litres) of stormwater to soak in every year.













ST. AUGUSTINE SCHOOL





BUDGETBIN.ca  
905-578-1435

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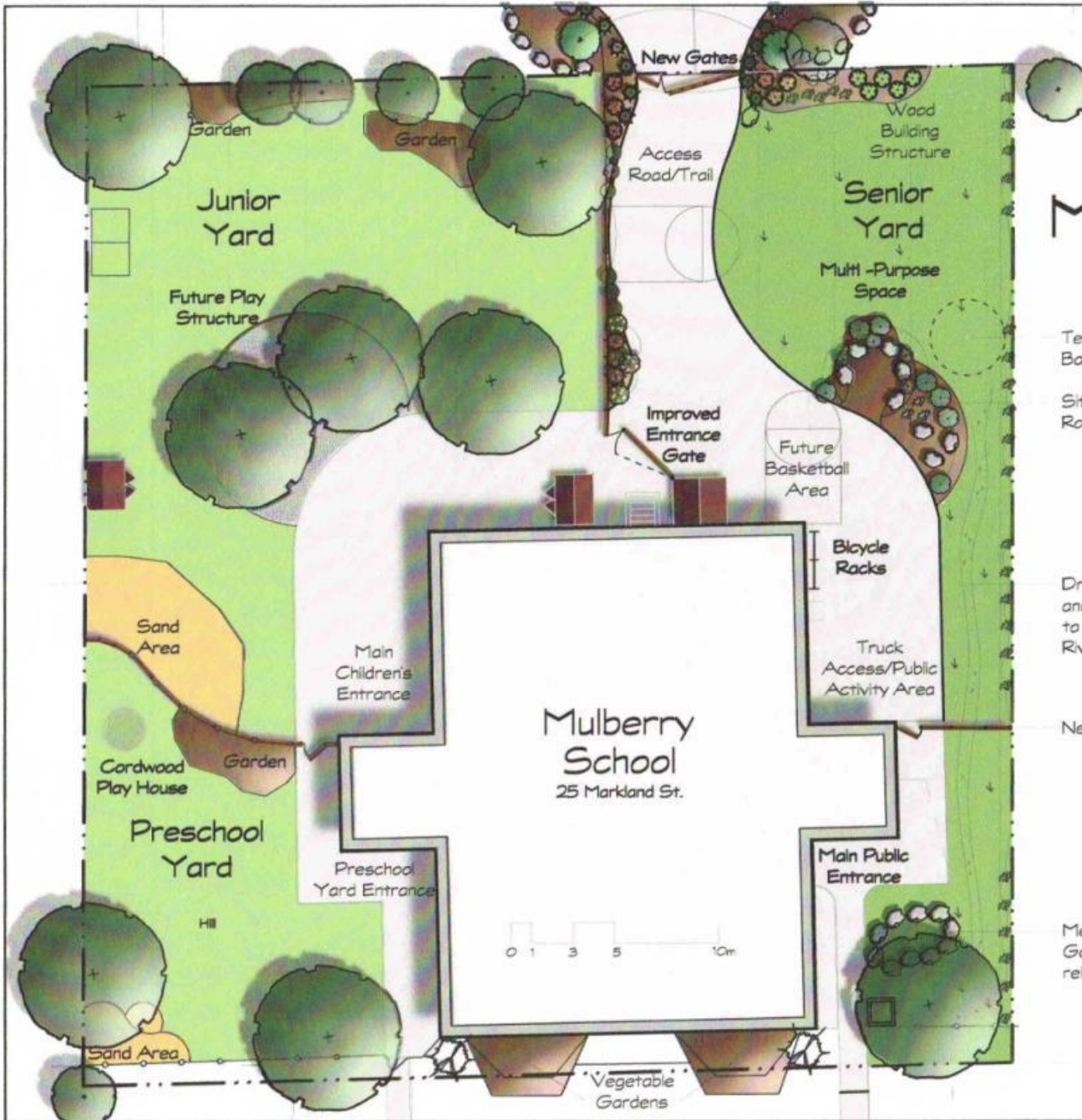


# Depave Kingston



Hearthmakers removed 350m<sup>2</sup> at a local elementary school, allowing 333m<sup>3</sup> (~333,000 litres) of stormwater to soak in every year.





# Mulberry School Master Plan

*Nurturing Spaces:  
dynamic, beautiful,  
imaginative.*

Mulberry Waldorf School's outdoor spaces foster the growth of healthy children and respectful friendships through active play and work. Our spaces nourish the spirit with natural beauty, and cultivate the imagination through opportunities to build, invent and create.

Tether Ball

Sitting Rocks

Drainage and Tribute to Historic River

New Gate

Memory Garden relocated









Mulberry  
Waldorf School







Mulberry  
Waldorf School

**DEPAVE PARADISE**

**This site was once an old parking lot.**

Every year a ton of asphalt and concrete ends up in the trash. It's a waste of money and resources. It's also a waste of space. This is why we're doing this. We're taking an old parking lot and turning it into a beautiful garden. It's a great way to help the environment and make our schools a better place. We're doing this for the future of our schools and our community. We're doing this for the future of our schools and our community.

**KEEPING OUR STREAMS CLEAN, AND OUR CITIES COOL!**

For more info or to get involved, visit [www.depaveparadise.org](http://www.depaveparadise.org) or [www.depaveparadise.org](http://www.depaveparadise.org)

**Partners:** METCALF FOUNDATION, Green Communities, Mulberry Waldorf School, WASHINGTON PARADISE

With a special thanks to the donors who made this possible. A special thank you to the staff and students of Mulberry Waldorf School who helped us with this project. We are grateful for the support of the community and the school. We are grateful for the support of the community and the school.





# Results to Date

522 M<sup>3</sup> diverted annually from 5 depave sites

DEPAVE Program Results				
	Area depaved (M2)	Affected Drainage Area (M2)	Annual Avg. Precipitation* (M)	Annual Avg. Vol. Diverted (M3)
Proponent				
Toronto	19	28.5	0.7098	16.18
Hamilton	93	139.5	0.7468	83.34
Kingston	350	525	0.7946	333.73
North Bay (projected)	50	75	0.7746	46.48
Collingwood (projected)	50	75	0.7002	42.01
			<b>Total volume (M3)</b>	<b>521.75</b>

Assumptions: Average annual rainfalls, affected drainage area 1.5 x depave size, 80% of rainfall absorbed on site

Green Venture







## What was your favourite part of the day?

*“I loved seeing the community pull together to help restore ecological balance.”*

*“It was great to see the excitement as people saw they could remove the pavement.”*





## What was your favourite part of the day?

*“Our favourite part was digging up asphalt and meeting the neighbors.”*

*“It was a wonderful opportunity to work with the community and do something positive for my child's school.”*



# Partnerships & Funding

## METCALF FOUNDATION



RBC  
Blue Water  
Project™



Hamilton-Wentworth  
Catholic District School Board

*Believing, Achieving, Serving*

Echo Foundation /  
Fondation Écho

THE  
HAMILTON **SPECTATOR**  
— thespec.com —





# Future Plans

*Build further community support for addressing stormwater management from a more ecological point of view.*

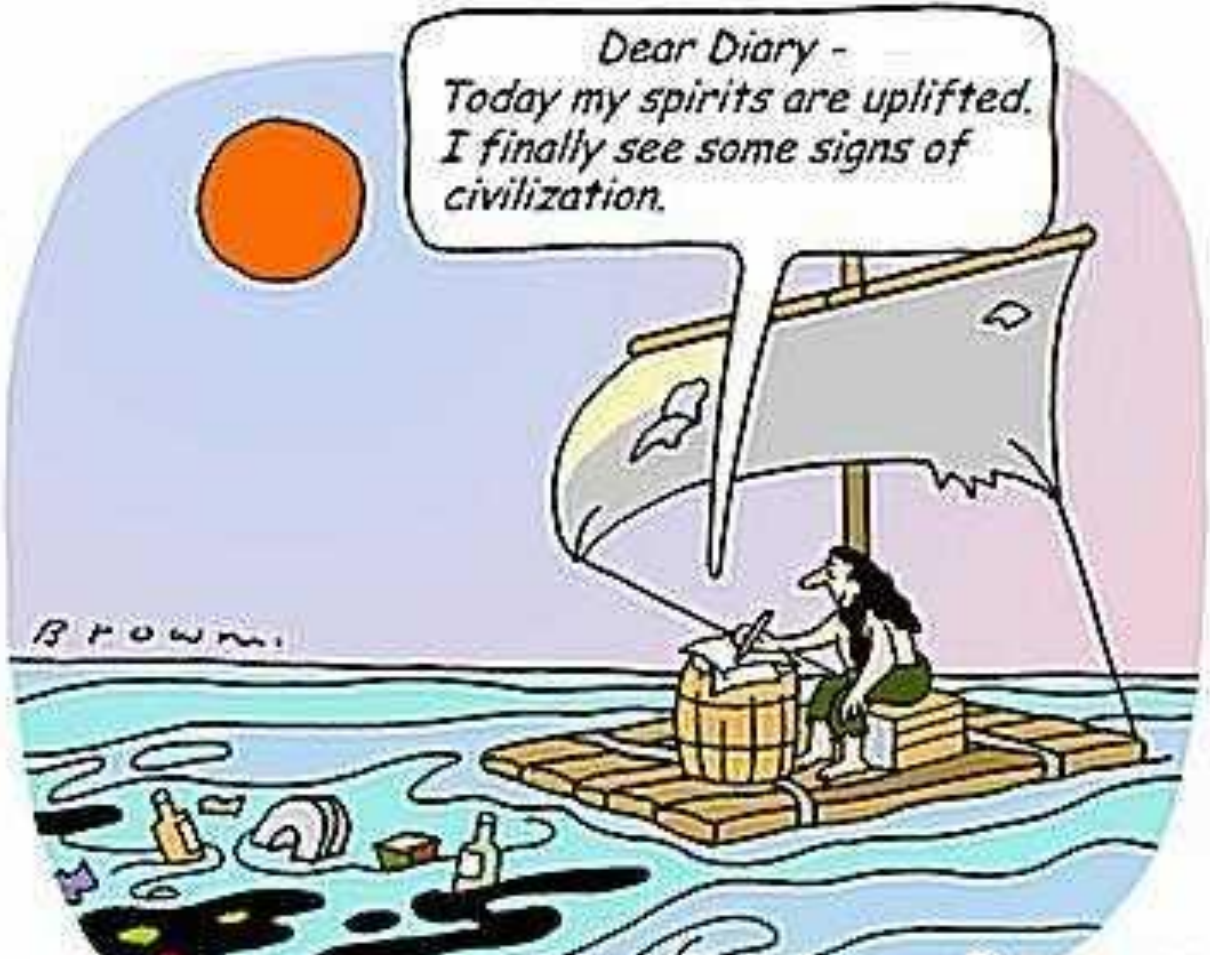
- 5 upcoming Depave projects
- Downspout disconnections
- Rain barrel installations
- Rain garden creation







# Green Venture



cartoonstock.com





# Thank you.

Kathryn Gold

Green Venture

[water@greenventure.ca](mailto:water@greenventure.ca)