



Inspiring and Supporting Protection of our Great Lakes

To Great Lakes Commission

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Integrated Water Management Study Found

- WWTP upgrade = \$25.5 Million
- SWM Retrofitting = \$15.5 Million



HIGH INTENSITY SHORT DURATION STORMS



July 8, 2013 – More dwellings in the floodplain



What does that
mean for future
development?

News / GTA

Mississauga resident living in tent since flood

Ken Hills, 60, is one of hundreds living near Cooksville Creek displaced since last week's storm.



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reddit this!



**58% of Canadians think
municipalities are upgrading
systems to handle excess
stormwater**



REALITY: 60-75% of GTA was built prior to flood control

Real-time Water Quality Monitoring



**Healthy Freshwater
Creek**
Less than 100mg/L



Ocean
20,000 mg/L



Urban Creeks
>20,000 mg/L







Credit Valley
Conservation

Need to go from Grey-to-Green



Industrial &
Commercial Lands



Residential Lands



Road Right of
Ways



Public Lands



Partnerships for Customer Solutions
5000 **VWR.COM**





Savings of 25% compared to conventional practices when land costs are considered



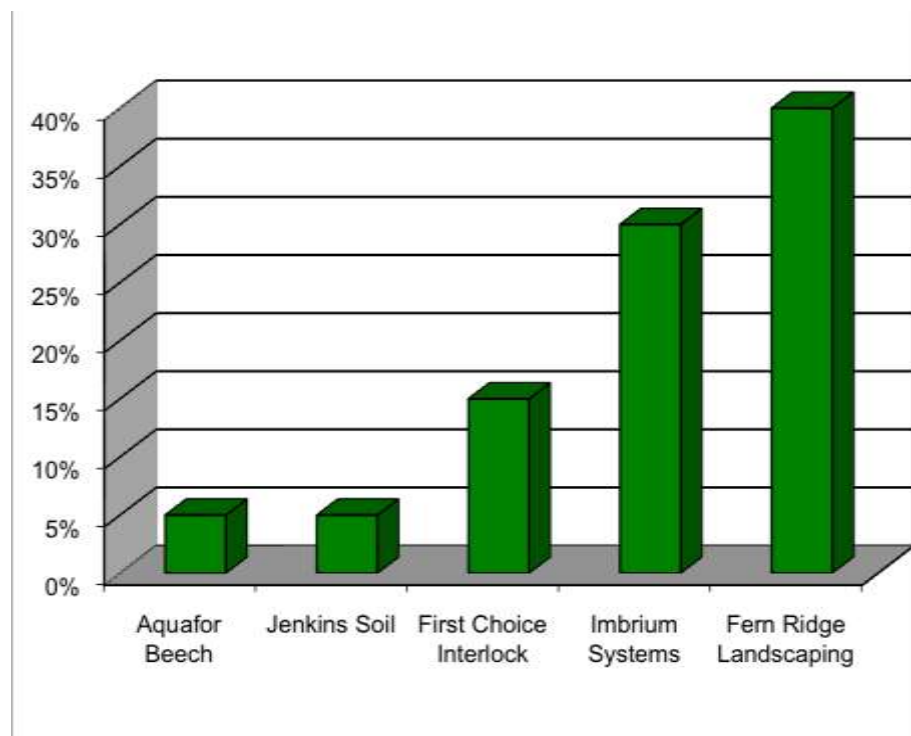
“This project will remedy a number of challenging maintenance issues and reduce our operating costs”
Nancy Cole - IMAX

LID is good for business

- Able to retain more than half of the July 8th storm!
- Onsite SWM = Added Security and Reduce stress on municipal system
- Reduce slips/falls – average WSIB is \$22,000



Projected growth in LID revenue



Local green business revenue is projected to grow up to 40% in the next 5 years

Summary



- **More Extreme Events** will impact our economy, public health, environment
- Extreme events are highlighting the interconnections between water, wastewater and stormwater demonstrating the need for an integrated approach on a watershed basis
- **Land-use Planning** needs to consider infrastructure vulnerability, needs to be adaptive
- **Need to add stormwater management** into existing urban areas
- **Need monitoring to minimize risk, demonstrate accountability, inform adaptation plans**

What's needed to assist municipalities



- Need regulations to require municipalities to integrate water management on a watershed basis
- Tools are needed to support asset and risk mgt decisions made from instream and nearshore targets
- Funding requirements need to include demonstration of sustainable funding mechanisms for long term monitoring, asset mgt and maintenance

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*Together, it's our nature to conserve
and our future to shape.*
