Stormwater Scorecard:
What Canadian communities are doing to reduce stormwater runoff and runoff pollution

About this project

Our Living Waters (OLW) is a national water platform developed by Canadian freshwater leaders and endorsed by more than 100 individuals and over 80 organizations at the 2014 Living Waters Rally. We are working together to achieve "All waters in good health by 2030".

With the Stormwater Scorecard, we aim to establish a baseline for the adoption of strategies that will transform the way rain is managed on the urban landscape, in order to address the growing impacts of current practices on runoff quantity (flooding, erosion), and quality (nutrients and other non-point source pollutants).

Rain is a resource

The goal is to transform the urban landscape so that runoff and runoff pollution are minimized, and most of the rain that falls is returned to soils, vegetation, and the atmosphere.

Green Communities CANADA

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The Stormwater Scorecard and the Soak it up! Toolkit

Traditional stormwater management relies on storm drains, catch basins, pipes and ponds – treating rainwater as a waste product to be removed as quickly as possible and discharged into waterbodies. A different approach is needed in order to reduce runoff and runoff pollution.

Green infrastructure manages rain where it falls via infiltration, evapotranspiration, and rainwater harvesting. Measures include rain gardens, bioswales, green roofs, infiltration galleries, cisterns, permeable pavement, and urban forests. It is increasingly being accepted as a key strategy for improving water quality and reducing flooding in urban areas, with lower costs than traditional "grey" infrastructure and a host of other co-benefits.

Municipalities are on the front lines of this change. Green Communities Canada developed the Soak it up! Toolkit in 2015 to provide examples of local policies and programs to manage rain where it falls being implemented across North America.

For this project, Green Communities Canada and Canadian Freshwater Alliance created the Stormwater Scorecard – an in-depth questionnaire designed to help communities identify what policies are now in place, and priorities going forward. We also created a "quick" Stormwater Scorecard – a short survey answerable in 5-10 minutes which asked about a few aspects of green infrastructure progress, including public projects, incentives for private property, stormwater user fees, community engagement, and local plans.

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Results

Representatives from 30 Canadian communities filled out the short survey.

- Most communities surveyed are not far advanced in adapting urban landscapes to manage rain where it falls. That said, many communities have some publicly accessible green infrastructure, most with only a few installations (between 1 and 10).

- Most communities do not charge a stormwater fee based on the impervious areas on properties, but it is increasingly on the radar and more communities are moving in this direction.

- Most communities do not provide incentives for the installation of green infrastructure on private property. Those that do are relatively weak.

- Many communities provide some level of public education or engagement on stormwater, green infrastructure or managing rain where it falls. Unfortunately, most of this engagement is perceived as weak and is not reaching most of the population.

- Communities appear to be making moderate commitments to green infrastructure in community plans.

Who filled out the Stormwater Scorecard?

Province	Communities
Alberta	Edmonton, Olds, Lethbridge, Parkland County, Red Deer (2)
BC	District of Coldstream, Courtenay, Kelowna (2), Salt Spring Island, Vancouver
Manitoba	Winnipeg
New Brunswick	Greater Moncton, Woodstock, Nackawic, Fredericton
Nova Scotia	Halifax, Lunenburg
Ontario	Aurora, Beckwith, Bluewater, Cambridge, Collingwood (2), Georgetown/Halton Hills, Kingston (2), Orillia, Ottawa, Peterborough (4), Sudbury (2), Thunder Bay, Toronto

Conclusions and next steps

Our survey suggests that most communities have not yet made significant progress towards managing rain where it falls. However, many municipalities, conservation authorities, provinces, community groups and provincial and national nonprofits are working hard to help move the transformation along.

Here is a list of the defining characteristics of a municipality that has implemented strategies to reduce runoff and runoff pollution, returning most rain to soils, vegetation and the atmosphere. See the Soak it up! Toolkit for examples, details, and further resources.

Fill out the Stormwater Scorecard to rate your community at raincommunitysolutions.ca/en/toolkit

❶ Policy and plans

Municipal policies and plans (stormwater management, land use, climate adaptation, sustainability, asset management, etc.) give priority to managing rain where it falls.

A green stormwater infrastructure strategy sets an ambitious target and implementation plan.

❷ Capacity

Local capacity exists in both the private and public sectors for the design, construction and maintenance of green infrastructure

Local standards for design, construction and maintenance have been adopted

❸ Implementation

Green infrastructure is part of regular municipal operations.

Projects are regularly constructed on the ground on public lands (rights of way, parks, schools, municipal buildings etc.)

Incentives and other supports are in place to install green infrastructure on private property as part of the municipal stormwater management system.

❹ New development

New development and redevelopment projects are held to a high standard (e.g. 90% of rainfall) to manage rain onsite via infiltration, harvesting, and evapotranspiration.

❺ Community engagement

Members of the community are well-informed about stormwater management and green infrastructure via a far-reaching engagement campaign (online information, workshops, community events, presentations, demonstration projects, site-specific advice, etc.)

Community supports green infrastructure including significant uptake of incentives for installation on private property