



Reducing our Runoff: Managing Stormwater Sustainably

What's the problem with stormwater runoff?

As our urban and rural landscapes become increasingly developed, stormwater runoff that falls after large rain and storm events has more opportunity to impact local water quality as it travels over hardened surfaces like roads, sidewalks and open fields. As it moves over these surfaces, the stormwater runoff collects pollutants, excess nutrients and sediments which are then carried into local natural water bodies. This can lead to contamination of our water sources, impacts to aquatic species, and potential flooding as runoff cannot be soaked back into the ground.



Traditionally, stormwater runoff has been managed by “grey” infrastructure like municipal sewers, sump pumps and ditches, where excess water is directed off hard surfaces and into municipal stormwater systems quickly and in large volumes.

These types of grey infrastructure can filter out larger objects, but do not treat contaminated water before it is transported into our local waterbodies. During large storm and rain events, the speed and amount of stormwater runoff can overwhelm municipal infrastructure, leading to flooding and property damage.

What is Sustainable Drainage?

Also known as Low-Impact Development, sustainable drainage aims to manage stormwater more efficiently while limiting impacts on the surrounding environment and aquatic systems. The overall goal of sustainable drainage is to manage water the way nature does, encouraging “green” infrastructure versus our traditional “grey” storm water systems.

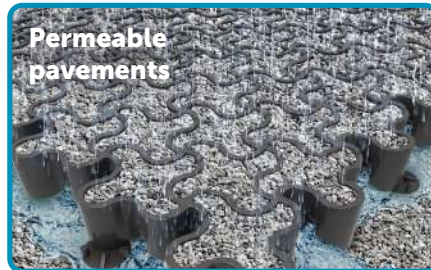
Stormwater Pollutant Examples:

- Lawn and crop fertilizers
- Pesticides
- Sediment from open fields
- Bacteria from pet waste
- Dirt from paths, farm roads
- Road salt
- Litter
- Oil and gas from vehicles

SLOW runoff as it exits hardened surfaces like downspouts, roads and fields
STORE excess runoff to limit erosion, flooding and overloading of municipal systems
SOAK runoff into surrounding soils, aquatic environments and groundwater reserves

Examples of Sustainable Drainage

Whether you have a single residential household or a larger farm property, there are many sustainable drainage solutions that are easily implemented to help minimize your stormwater runoff. This includes rain gardens, rain barrels, swales, soakaway pits, infiltration trenches, permeable pavements and more. For more information on these specific sustainable drainage solutions, use the QR code below to visit our resource page.



Sustainable Drainage in the Rideau Valley Watershed

To help reduce negative impacts to local waterways and encourage sustainable drainage, RVCA has partnered with the Township of Rideau Lakes, Cataraqui Region Conservation Authority and the Big Rideau Lake Association to develop recommendations for reducing runoff in the Rideau Valley watershed.

These recommendations include developing education materials like these Sustainable Drainage fact sheets, and increasing general awareness across the watershed through outreach and social media. When communities come together to reduce our runoff, we can make a big difference in protecting our lakes, rivers, and aquatic ecosystems!

Consult a professional for site-specific concerns. **Call before you dig:** www.on1call.com.



More resources

Follow the QR code to find more sustainable drainage resources and ideas for your property.

