# Rain Gardens

A rain garden is a landscaped feature that replaces an area of your lawn in order to collect the stormwater (rain and melted snow) that runs off your grass, roof and driveway. This shallow depression has loose, deep soil that absorbs and naturally filters the runoff, preventing it from entering the storm drain system and, eventually, our waterways.

### Why build a rain garden?

Rain gardens are not only beautiful and creative, they are also functional. By planting a rain garden, you can help maintain the natural water cycle while protecting local rivers, lakes, fish and drinking water sources.

#### Rain gardens:

- Limit the amount of water that enters the local storm drain system.
- Reduce the potential for flooding, drainage problems and stream bank erosion.
- · Reduce the quantity of pollutants that run from our yards and roads straight into our waterways.
- Restore and recharge our groundwater system.
- · Are low maintenance. They are planted with beautiful, hardy plants that require little to no watering.
- Attract birds, butterflies and beneficial insects, such as mosquito-consuming dragonflies.
- · Complement any style of landscape and enhance the beauty of the surrounding neighbourhood.

## Creating your own rain garden

Rain gardens require four elements:

- A source of stormwater runoff, such as a downspout.
- An absorbent soil mix.
- Full, or partial sun.
- Native plants that are both water-tolerant and drought-tolerant.

Properly constructed rain gardens are designed to allow overflow in a large. rain event and hold standing water for no more than 48 hours.

Compared to a patch of lawn, a rain garden allows about 30% more water to soak into the ground!

# Garden for Cleaner Water

### What is stormwater runoff?

Stormwater runoff is the water that runs over and off the land during a rainstorm or snowmelt, rather than soaking in.

### What is the problem?

As stormwater runs over streets, parking lots, and lawns it can pick up and carry many kinds of materials that get washed into storm drains. Storm drains are specialized drainage systems designed to handle an excess of water from flooding or heavy rainfall. They lead directly into the nearest water body. Large objects are screened out, but the water is not filtered and is carried to nearby streams and lakes. This leads to stormwater pollution!

# Where do these pollutants come from?

Stormwater picks up contaminants including:

- Fertilizers
- Pesticides
- Bacteria from pet waste
- Eroded soil
- Road salt
- Grass clippings
- Litter

Just to name a few! These pollutants wash into ditches and down storm drains, and end up in local waterways. Rain gardens capture and filter stormwater, helping to reduce runoff. While an individual garden may seem like a small thing, collectively they can produce substantial benefits to the community.

Text Credit: Christopher Obropta, Ph.D, P.E. Extension Specialist, Rutgers Cooperative Extension Water Resources Program

# What will it look like?

Rain gardens complement any style of landscape and can be adapted to personal preferences. They can be large or small and can take advantage of pockets of space in your yard.



Graphic courtesy of: The City of Calgary

### **Frequently asked questions**

### Will it be expensive or difficult to install and maintain a rain garden?

Once a shallow depression is dug for the rain garden, it won't be any more expensive than planting other landscaped areas in your yard. Most of the recommended plants can be purchased at local nurseries, and you maintain them just like any other plants in your yard. We recommend using native plants, which once established, will require less water and no fertilization.

### Will a rain garden create a pond for mosquitoes?

No, a rain garden is not a pond. When properly constructed, the water will drain within 48 hours (but usually faster). Mosquitoes won't find rain gardens to be good breeding areas because they need much more time to lay and hatch eggs.

### I am interested in building a rain garden. What should I do next?

- Visit www.trca.on.ca/greeningyourgrounds for step-by-step instructions.
- Visit www.cmhc.ca and type rain gardens in the search field from more information.

Be part of a growing trend. Build a rain garden of your own!

For more information please contact, Toronto and Region Conservation 5 Shoreham Drive, Downsview, ON M3N 1S4 T. 416.661.6600 F. 416.661.6898 www.trca.on.ca/yards





\*Credit for parts of this text is given to the City of Calgary's Water Services Department