

## **What is Runoff**

Runoff is water from rain and melting snow that isn't absorbed into the ground. Instead it runs over hardened surfaces like driveways and roads before it "runs" into our lakes and watercourses. As runoff flows over these surfaces it picks up and transports pollutants such as fertilizers, pesticides, soil, animal waste and other harmful substances. These pollutants reduce water quality, harm aquatic wildlife and even contribute to algae blooms!

# What can you do?

Runoff needs to be slowed down and spread out so that the ground has a chance to absorb it. Or, capture runoff to use later for watering gardens.

#### 1 Install a Rain Barrel

A rain barrel placed at the end of your downspout collects runoff from your roof. The stored water can then be used for your garden or lawn during dry periods. Rain barrels come in a variety of sizes and colours and are a great first step in reducing your runoff.

## **2 Increase Natural Vegetation**

Trees and shrubs reduce runoff by capturing and storing rainfall, encouraging infiltration, and even taking up pollutants. This vegetation is especially important along shoreline areas where a healthy vegetated buffer is the last line of defense before runoff enters the waterbody. Native species provide the greatest benefits because they are typically deep rooted, adapted to the local climate and are non-invasive.

#### 3 Install a Rain Garden

Rain gardens are shallow, sunken gardens where runoff can be directed into and slowly absorbed into the ground. These gardens are filled with loose permeable soil and deep rooted, flood tolerant native plants. They look just like regular gardens! Rain gardens should be constructed in areas with relatively good drainage, located at least three metres away from building foundations and away from septic beds.

#### **4 Increase Permeable Surfaces**

Reduce hardened, paved surfaces on your property like driveways, patios and pathways. Instead, use permeable or natural materials like gravel, mulch or interlocking stone. Even manicured lawns have low infiltration rates due to shallow roots and minimal surface area. Consider replacing unused areas of manicured lawn with a native perennial garden or naturalized area.

## 5 Install a Soakaway Pit

If a rain garden isn't possible, consider a soakaway pit. Soakaways are similar to raingardens, but instead of being filled with permeable soil and plants, they are filled with rock or stone. Runoff directed into a soakaway pit is stored in the spaces between rocks before allowing it to slowly infiltrate into the ground. Soakaway pits should be lined with landscape fabric and kept free of sediment and debris. They are low maintenance and can fit into small or narrow spaces.

#### **6 Create Natural Terraces and Meandering Pathways**

If you own a shoreline property with a steep slope down to the water, you can slow runoff by creating natural terraces out of branches or fallen trees. When placed parallel to the slope, these terraces create a pooling area where runoff can infiltrate and plants can establish. A meandering pathway down to the water also helps to prevent water from running directly down a slope and into the lake or river.

### 7 Redirect your downspouts away from hardened surfaces

Redirect your downspouts away from hardened surfaces like driveways and sidewalks so that they outlet onto permeable surfaces like grass or naturalized areas.