A Rain Garden is an appealing landscape feature that can be installed easily by a home or business owner to manage stormwater and protect freshwater resources. A rain garden is designed to receive water from impervious surfaces such as roofs, driveways, and sidewalks and encourages infiltration of stormwater. These landscape features intentionally hold stormwater so that it can percolate into the ground to be used by plants and replenish groundwater supplies instead of allowing the water to become runoff that flows into the street, down a storm drain, or into a drainage ditch.

**RAIN GARDEN REQUIREMENTS**

Installing a rain garden requires:

- A suitable area at least 3 meters from the house between a rainwater source (such as a gutter downspout) and a rainwater destination (such as a storm drain or ditch),
- Materials, such as...
- **adequate soils that drain well** (To test drainage, dig a hole 12 inches deep and fill with water. If the hole retains water for longer than 48 hours, the soils will need to be enhanced. A good rain garden soil mixture that provides adequate drainage contains 50-60% sand, 20-30% top soil, and 20-30% compost. If the hole never drains, the water table is too high, and a rain garden is not an appropriate landscape feature.),
- **native plants** (The most effective and sustainable rain gardens contain a mosaic of plants including perennial grasses and herbs, small shrubs, and even trees.), and
- **a dense, heavy mulch** (such as pine bark nuggets or hardwood mulches),
- Earth-moving tools (shovels, hoes, and augers to excavate and plant),
- A willingness to retain some stormwater on your property to protect water quality in our lakes and rivers.

**More elaborate designs may require additional piping to convey water to the rain garden and disperse water below ground.**

**HOW TO BUILD A RAIN GARDEN**

The size required for a rain garden depends on the size of the impervious surface draining to the garden and the ability of the soils to drain surface water. The average rain garden should be about 1/5 (20%) the size of the area draining to the garden. For instance, if the rain garden is intended to receive water from a 1,000 square foot rooftop, the garden should be at least 200 square feet or 10ft X 20ft. In more poorly drained soils, the size of a rain garden should be increased.

Once a site has been chosen, the garden will need to be excavated 12 to 18 inches. In poorly drained soils, an expanded drain field may need to be constructed using perforated piping. In well drained soils, only compost may need to be added. In poorly drained soils, a mixture of sand, top soil, and compost will need to be added to the excavation.

After excavating and amending the soils, plants can be installed. Fertilizer should be applied at first installation to help plants become established. Also, plants will need to be watered regularly through the first growing season. Once the plants are established, very little fertilizer or additional water will be necessary. Native plants are adapted to the local soil types and rain fall amounts and require little maintenance after establishment.

Please visit the Fact Sheets section of the CWSEC website’s Reference Tools and Publications page to download a list of plants suitable for use in your rain garden.