



# Rain Gardens

*A beautiful way to enhance water quality*

**W**hen a landscape is covered in natural vegetation, most rainfall soaks into the ground. As we start adding roofs, driveways, sidewalks, and streets to the landscape, much of the rainfall can't soak into the ground anymore, resulting in runoff that can carry dirt, oil and chemicals into streams and groundwater. Rain gardens collect, filter, and/or infiltrate stormwater runoff, allowing pollutants to settle out. After the water percolates through the garden soil it either infiltrates into the ground below or is piped to its downstream destination. Numerous design variations of shape and planting schemes can be used to fit the character of a site. Typically, a rain garden is a small garden planted in a shallow depression and often includes native plants. Rain gardens can also be designed to provide habitat for birds, butterflies and beneficial insects.

## What does a rain garden look like?

On the surface, a rain garden looks like an attractive garden. It may support habitat for birds and butterflies, it may be a formal landscape amenity or it may be incorporated into a larger garden as a border or as an entry feature. What makes it a rain garden is in how it gets its water and what happens to that water once it arrives in the garden.

## How does a rain garden work?

Below the surface of the garden, a number of processes are occurring that mimic the hydrologic action of a healthy forest. Soils are engineered and appropriate plants selected for the rain garden. The garden helps to clean stormwater and reduce its volume. The rocks, soil and plants in a rain garden reduce the nitrogen, phosphorus and sediment loads in the stormwater. Multiple rain gardens over an area will have a positive cumulative effect on both the volume and quality of stormwater runoff.

## Why plant a rain garden?

By mimicking the natural absorption and pollutant removal abilities of a forest, meadow or prairie, rain gardens can absorb runoff more efficiently — as much as 30–40 percent more than a standard lawn. By capturing rainwater in a rain garden, holding it, and then slowly releasing it into the soil or overflow, the rush of a large storm can be slowed and cleaned quickly, neatly and naturally.

## Maintenance

- Plant and re-plant vegetation as needed
- Remove sediment and debris to prevent clogging of overflow drains or interference with plant growth.
- Remove invasive vegetation when discovered (including blackberries, english ivy)
- Maintain or add new rock splash pads as needed to prevent erosion



*Rain gardens are one very good option to lower the impact of impervious surfaces and polluted runoff in our community. They are low-tech, inexpensive, sustainable and beautiful.*



## Rain garden FAQs

*Do rain gardens encourage mosquitoes?*

A properly designed rain garden will not breed mosquitoes. Water should sit in the garden for a maximum of two to three days. Mosquito larvae take seven to eight days to mature.

*Are they difficult to build?*

Building a rain garden in a front or backyard is relatively easy. If you want to create a rain garden next to a driveway, street, or want to install a rain garden to meet City of Eugene stormwater development standards specific sizing requirements and detailed information is required. See the City's Stormwater Management Manual (link at right) for additional information.

*Do rain gardens require a lot of water?*

No. If you select the right plants, after they are established, the plants in a rain garden will do fine with the water that nature provides.

Rain gardens can be part of a sustainable and attractive landscape. Rain gardens:

- Are an easy way for all of us to do our part to protect our streams and rivers.
- Are planted with beautiful, hardy, low-maintenance perennial plants.
- Provide food and shelter for birds, butterflies and beneficial insects.

*Other strategies to intercept rainwater to replenish natural systems include vegetative and grassy swales, stormwater planters, pervious pavers and eco-roofs and roof gardens.*

## Resources

There are many good resources about rain garden construction on the internet, including:

<http://emswcd.org/raingarden>

Stormwater Management Manual

<http://www.eugene-or.gov/?nid=477>

Oregon Rain Garden Guide

<http://extension.oregonstate.edu/gardening/node/1083>



## How can I get help?

For more information: contact Public Works Stormwater Management Program staff at the Permit and Information Center, 99 W. 10th Ave, Eugene, OR 97401. Information Center hours are 9 a.m. to 5 p.m. Monday through Friday. Call: 541-682-8400  
[www.eugene-or.gov/stormwater](http://www.eugene-or.gov/stormwater)