

Rain Gardens

A beautiful way to enhance water quality

When 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 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 and filter out as the water percolates through the planter soil before infiltrating into the ground below or piped to its downstream destination. Numerous design variations of shape, and planting scheme can be used to fit the character of a site. Typically, a rain garden is a small garden planted in a shallow depression that is often planted with 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% 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.

Rain gardens are one very good option that helps to lower the impact of impervious surfaces and polluted runoff because they are low-tech, inexpensive, sustainable and beautiful.

Maintenance

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

Rain garden FAQs

Do they breed 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 for additional information (link and contact information on the back).

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.

Resources

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

www.raingardennetwork.com

www.native-raingarden.com

www.raingardens.org

www.native-raingarden.com

<http://emswcd.org/raingarden>

www.urbanwaterquality.org

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

How can I get help?



For more information: contact Public Works staff at the Permit Information Center (PIC).

In person: 99 W. 10th Ave. (Atrium Building) from 9 a.m. to 5 p.m., Mon.-Fri.

Voice-mail: 541-682-8400

Email: cewepic@ci.eugene.or.us

Web: www.eugene-or.gov/stormwater

(See section 2.9 of the City of Eugene's **Stormwater Management Manual** for details.)

