Rain Garden – What Is It, and Why Would We Want One?

What is a rain garden? Do we need one? What benefit does it provide? These are questions many gardeners are beginning to ask as they hear the words rain garden being bantered around. Erroneously some people think a rain garden is a spot in the yard that fills with water and becomes a mini pond for portions of the year, especially in the rainy weather from winter through spring and sometimes even into summer.

What rain gardens really are is a constructed shallow area of a garden where surface rain (called stormwater) that runs off roofs, driveways, sidewalks and the landscape can linger for a day or two and be filtered and absorbed by soil and plants rather than being channeled away from the land to whoosh and rush out into our streams, lakes and into Puget Sound through stormwater pipes. Plants and materials in a rain garden aid in removal of pollution. Water that stays on the land also recycles into the air replenishing groundwater and water cycles.

The Rain Garden Handbook from Washington State University Pierce County Extension [http://pierce.wsu.edu/Lid/raingarden/Raingarden_handbook.pdf](http://pierce.wsu.edu/Lid/raingarden/Raingarden_handbook.pdf) is a step by step guide for home gardeners. Free copies are available at Washington State University Kitsap Extension Office. The handbook can also be downloaded for free from the link.

WSU Extension and Washington Sea Grant have launched the Rain Garden Mentor Program in Puget Sound. Find Kitsap’s at [http://raingarden.wsu.edu/Kitsap.html](http://raingarden.wsu.edu/Kitsap.html) where individuals and groups can register rain gardens they’ve installed on their properties or in their communities. The website includes tips and helpful links and information about rain gardens. A core group of WSU Kitsap Extension Rain Garden Mentors will be available to conduct site visits and present workshops throughout the county. To schedule a visit from the Rain Garden Mentors please call the WSU Kitsap Extension office 360-337-7224.

Rain gardens can cost between $500 and several thousand dollars to construct. However, installation can occur over time, or a person can decide to build several groupings of rain gardens. For example if you have a shed, garage and house, one year you may want to capture the runoff from just the shed. The next year add the garage and finally add the whole house. Every little bit helps. A single downspout may only need a rain garden as big around as your outstretched arms, easily built with a little shovel time, a handful of plants and a cubic yard of sand and compost mix.

Rain Garden Dos and Don’ts

There are a few places not to install a rain garden. Avoid septic drain fields and over the septic tank. Keep at least 50 feet between a rain garden and the septic system or well. Always call before you dig to have the location of all utilities identified. If your property has healthy native soils and abundant native plants, or you live in a forest or naturally vegetated area, building a rain garden may not be for you. You are actually living in a nature-made rain garden already.

Avoid areas where water regularly puddles longer than 24 hours. Do not construct a rain garden where the groundwater is within 1 foot of the bottom of the finished rain garden. Stay 10 feet away from building foundations. Definitely stay at least 50 feet or more away from steep slopes or bluffs. The added weight, disturbance and water filtering through these geological features could result in slope or bluff failure and collapse.
Some neighborhoods and areas of the county already have infiltration pits to manage stormwater and a rain garden may not be applicable or allowed. However rain barrels of any size to capture water from downspouts are permitted. The water from rain barrels can be used to water landscapes. Stillwaters Environmental Center and Kitsap PUD offer rain barrels for purchase, along with installation instructions.

**Anatomy of a Rain Garden**

Rain gardens are usually only 12 to 24 inches deep. Planting areas, once soil is added, can sometimes be as shallow as 6 inches deep. Water remains in a rain garden for one to two days at the most (not long enough for mosquitoes to breed). A rain garden includes:

- a dug depression that is flat and level on the bottom and has sloped sides
- an inflow and overflow area (includes piping and rock for drainage during overflow)
- rain garden soil mix (if the existing soil won’t suffice)
- a mulch layer
- plants selected for their ability to remain wet during wet weather and tolerance of dryness during dry weather

**Steps in Building a Rain Garden**

The “Rain Garden Handbook” contains complete step by step instructions. WSU Kitsap Extension, Washington Sea Grant and Rain Garden Mentors can be consulted for a site visit or presentation. Call 360-337-7224 to set up an appointment. Here are the steps in a nutshell:

- Spend some time during rainy weather (which is now) watching where the water flows into and off of your own property (remember to observe gutters, downspouts and drain pipes)
- Notice where water puddles for longer than a few hours
- Determine the site(s) for the rain garden (the handbook details how to calculate the size of the rain garden structure).
- Conduct a soil drainage test (this will determine if you must order special soil or if your current soil is suitable).
- Mark out the rain garden with a hose or other markings (string and stakes, landscape paint, flour).
- Begin excavation/digging and construction (making sure the bottom of the hole is flat and level and the sides are properly sloped).
- Direct water to the rain garden from downspouts, driveways or other hard surfaces and construct a safe overflow.
- When the rain garden is dug and laid out start filling in with soil, plants and mulch.
- Water in all the plants at installation (continue watering when needed until the plants become established).
- Weed regularly throughout the first year as needed.
- Monitor the plants, soil structure and mulch during the first year.
- Make adjustments when necessary (i.e. add more mulch when it shifts or washes away).
- In future years some of the plants may need digging, dividing or pruning now and then.
Other Tips for Rain Gardens

- If you’d like to pay for a rain garden installation consult with local nurseries and landscape organizations (WALP or WSNLA) for a list of professionals who are experienced in designing and installing rain gardens.
- If you choose an installer/designer/landscape professional make sure they know what they’re doing – ask for photos of installations and for references.
- Determine that the installer/designer/landscape professional has taken classes and certifications on rain gardens and/or LID.
- Involve your friends and/or neighbors in constructing rain gardens in your area of West Sound. You’ll be able to share plants, possibly rent equipment for a day or learn together by digging and planting as a group.
- Remember not to compact the rain garden area (other than foot pressure during construction) – compacted soils do not function properly.
- Many local West Sound landscape supply companies are now carrying rain garden soil mixes and mulches.
- Several West Sound cities and municipalities will be offering homeowners incentives to encourage installations of rain gardens. Check with local DCD (Departments of Community Development) or SSWM (Surface and Stormwater Management) departments in your region for details and info on incentives.
- The Kitsap Conservation District can help provide monetary incentives for those living in unincorporated Kitsap County. Contact Teresa Brooks (see sidebar)

Thanks to Jeff Adams, Washington Sea Grant and WSU Extension Kitsap for the information provided in this article. There are many resources available in West Sound to help in making a decision for your particular property. Remember a rain garden is not for everyone, but if it will work on your own property it’s a great way to incorporate more plants into an existing planting palette and improve streams and shorelines at the same time. You possibly already have many of these plants in your own landscape, just waiting to be dug, divided and planted into the perfect rain garden feature at your home.

Rain Garden Assistance:

Washington Sea Grant
Jeff Adams
360-229-9398
jaws@uw.edu
345 6th Street Suite 550
Bremerton WA 98337-1874

WSU Kitsap Extension
Peg Tillery
360-337-7224
ptillery@co.kitsap.wa.us
345 6th Street Suite 550
Bremerton WA 98337-1874
Rain Garden Websites:

http://pierce.wsu.edu/Lid/raingarden/Raingarden_handbook.pdf is a complete Rain Garden Handbook, designed especially for home gardeners, published and available online from Pierce County Extension. It includes numerous landscape plans and plant lists for a wide variety of gardening situations.

http://en.wikipedia.org/wiki/Rain_garden is a very thorough and footnoted compilation of information on rain gardens.

http://raingarden.wsu.edu/Kitsap.html - the WSU Extension/Washington Sea Grant website for rain garden information for West Sound

Links to Professional Resources Websites:

Washington State Nursery & Landscape Association
http://www.wsnla.org

Washington Association of Landscape Professionals
http://www.walp.org

A Few Locations in West Sound to View Rain Gardens:

Roadhouse Nursery
12511 Central Valley Road
Poulsbo WA 98370
360-779-9589
http://www.roadhousenursery.com

Kitsap Conservation District
10332 Central Valley Rd
Poulsbo WA 98370
360-337-7171
http://www.kitsapcd.org/

Breidablik School
25142 Waghorn Rd
Poulsbo WA 98370
360-779-8802

Stillwaters Environmental Education Center
26059 Barber Cut Off Road
Kingston WA 98346
360-297-1226
http://www.stillwatersenvironmentalcenter.org/

Parking Strips on church row
Veneta Avenue
between 11th and 9th Streets
Bremerton WA

Strips between roadway and sidewalks
Pacific Avenue
between 6th and 5th Streets
Bremerton WA

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