

What is a Rain Garden?

A rain garden is just what it sounds like, a garden that thrives in the rain! Rain Gardens are gently sloped 'ditches' that are planted with wild flowers and other native vegetation to replace areas of lawn. The gardens fill with rain water, which allows the water to percolate slowly into the ground, which serves two purposes.



First, this slow permeation through the plant material helps to filter pollutants and impurities out of the water before it replenishes the underground water table, helping to keep water in our streams and rivers over the dry summer months.

Secondly, by giving the rain somewhere to settle and soak in, we reduce the amount that goes rushing off our roofs and down our streets, carrying undiluted toxins, waste and bacteria to our streams, rivers and already beleaguered beaches.

Here in Brookings, nearly 58% of our town is covered in impervious materials- serious degradation to streams, rivers and beaches can be seen at levels as low as 30%. It makes sense for all of us, to begin taking action now to preserve the beauty and health of our community for years to come. Compared to a patch of conventional lawn, a rain garden allows about 30% more water to soak into the ground, so while helping to keep our rivers and ocean clean, we are also helping to cleanse and replenish our very own drinking water!

Frequently Asked Questions

Do rain gardens breed mosquitoes?

No. Because rain gardens are shallow and are only built on soils with sufficient drainage, they are designed to dry out before mosquitoes can reproduce.

Will my rain garden have standing water for more than a day?

Rain gardens are designed to infiltrate water in about a day. If it rains several days in a row, it is possible that your rain garden may have standing water until the rain stops and the water has time to soak in.



Plants that Thrive in a Rain Garden

Creeping Oregon Grape	Fringecup	Yarrow
Douglas Aster	Salal	Common Camas
Oregon Iris	Stream Violet	Large Leaved Avens
Coastal Strawberry	Tufted Hair Grass	
	Red Columbine	

How To Plant a Rain Garden



Saving Tomorrow's Water Today!



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So, how do I plant one?

To select a location for the rain garden, begin by observing your yard during a rainfall event. Notice where water is flowing from, and where it is going. Rain gardens should ideally be located between the source of runoff (roofs and driveways) and the runoff destination (drains, streams, low spots, etc.). Find a spot in your yard where you can easily direct the runoff from your



downspout or other impervious surface. Do a percolation test to ensure that the soils in that spot can soak up rain water.



To avoid drainage problems, place your rain garden at least ten feet from your house and five feet from your property line. Call your local jurisdiction to find out if you need a permit to disconnect your downspout or if there are special requirements.

Dig a shallow depression to create a rain garden area about six inches deep. You can make it as long and wide as you like - the bigger it is, the more rain water it can soak up. Don't forget to call before you dig so you don't hit any buried utility lines. In Oregon call (800) 332-2344.

Use the soil you dig up to create a berm on the down slope side and direct the overflow safely away from nearby buildings. Make the bottom of your rain garden level. If you like, you can amend the soil in your rain garden with compost.

Plant your plants and then mulch. Water the plants until they are established.



The percolation test

Dig a hole at least 12 " deep.
Fill it with water and let it drain.
Fill it with water a 2nd time. If the water drains at least 2 " per hour the 2nd time, your soil has adequate drainage for a rain garden.

Be sure to consider the following:

- 1) The garden should not be within 10 feet of the house foundation
- 2) Gardens should be located at least 25 feet from a septic system drain field
- 3) Gardens should not be placed within 25 feet of a well head
- 4) Make sure to avoid underground utility lines
- 5) The best location for the garden will be in partial to full sun
- 6) Rain gardens should be constructed where the water table is at least 2' below the surface of the soil. If you hit the water table when constructing your rain garden, consider turning it into a wetland garden.



Once a location is selected, you may decide to send additional water to this site. Flexible plastic pipe can be used to direct water from downspouts and collecting areas to the rain garden. Corrugated plastic pipe can be used to direct water from a distant downspout to the garden drainage area. Be sure to factor this additional water flow into your garden sizing calculations.

Determine the size of the impermeable drainage area, then use the following chart to determine your rain gardens dimensions. 6' and 3' depths are assumed:

Impervious area	Required Size 6"	Potential dimension	Required Size 3'	Potential dimension
800 ft ²	40 sq ft	4x10, 5x8, 6x7	80 sq ft	7x12, 8x10, 9x9
1000 ft ²	50 sq ft	5x10, 6x8	100 sq ft	7x15, 10x10
1200 ft ²	60 sq ft	4x15, 5x12, 8x8	120 sq ft	10x12, 8x15
1400 ft ²	70 sq ft	5x14, 7x10	140 sq ft	1-x14, 7x20
1600 ft ²	80 sq ft	7x12, 9x9	160 sq ft	8x20, 10x16
1800 ft ²	90 sq ft	6x15, 7x13	180 sq ft	9x20, 12x15
2000 ft ²	100 sq ft	7x15, 10x10	200 sq ft	14x15, 10x20
2500 ft ²	125 sq ft	8x16, 10x13	250 sq ft	13x20, 15x17



Additional Resources

<http://www.rain2o.com>

<http://ww.deq.state.or.us/programs/>

<http://www.tilth.org/education-research> search: rain garden

<http://welcometherain.org/sustainability/10ways.htm>