Rain Gardens

By Gloria Williams
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Plentiful precipitation? Manage excess storm water with a rain garden!

Rain gardens can be shaped and sized to fit almost any space, even the sometimes problematic boulevard areas bordering streets. Photo by Seattle Public Utilities

If this run-off water could be diverted to areas of absorbent soil and native plantings, allowing it to soak in slowly and filtering out the pollutants, it would arrive at its final destination in a much cleaner state. That realization is what gave birth to the idea of the rain garden.

For 20 years large housing developments and industrial developments have used this concept, calling them bio-retention ponds, infiltration basins, or storm water marshes. Maryland's Prince George County Department of Environmental Resources is credited with originating the name "rain garden." Today municipal governments are expanding on this

The idea of creating a rain garden may seem a little redundant here in our already wet Pacific Northwest. But a rain garden is not intended to promote more rain; rather, it's meant to be a means of dealing with the excess water from our already plentiful precipitation. It is a drainage concept to manage run-off from the ever increasing layers of streets, sidewalks, driveways, parking lots and the other impermeable surfaces we build to make life easier for ourselves.

The downside of covering so much of the landscape with nonporous surfaces is the creation of pollution problems in water sheds, wetlands, streams, rivers and ultimately the waters of Puget Sound. The storm water that flows so rapidly off these impervious surfaces carries with it the remnants of pollutants such as fertilizers, pesticides, oil, grease, de-icing salts, heavy metals and bacteria from animal waste.

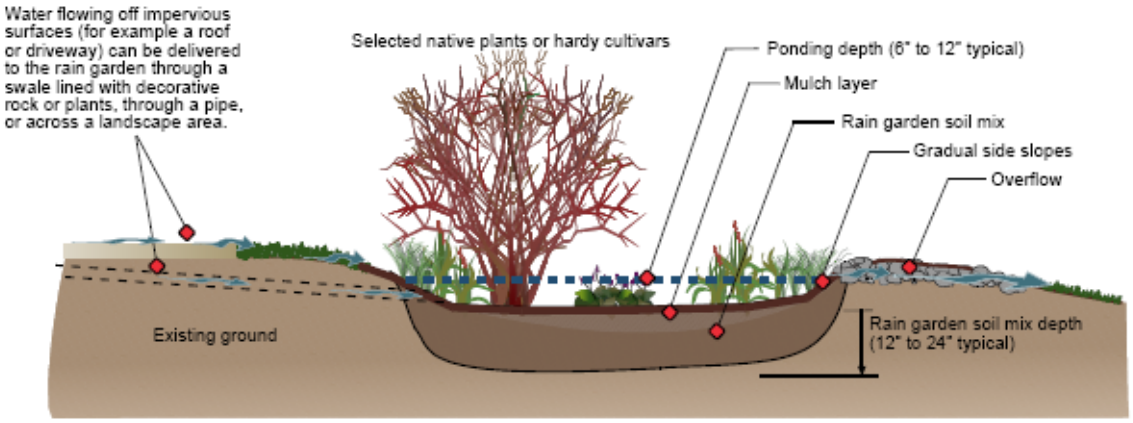
A newly planted rain garden in Seattle. Rain gardens are one of the most versatile and effective tools in a new approach to managing storm water called low impact development (LID). Photo by Seattle Public Utilities

idea to manage storm water. Parking strips are being made into mini rain gardens. Entire communities are working with city agencies to establish rain gardens along neighborhood streets to replace drainage ditches. Individual homeowners are now getting involved and are building rain gardens on their property to handle run-off from their own buildings and nonporous surfaces.

Rain gardens work for urban settings, too. This one in Bellingham captures runoff from the impervious surfaces that border it. Photo by Becky Williams

To build a rain garden requires a little thought and a plan that fits the contours of your property and the type of soil present. If you have a natural basin-shaped depression in your landscape, you may be able to use that for your rain garden. It needs to be located where water flows naturally from downspouts, driveways or patios, but far enough away from house foundations to prevent water from seeping into basements. If there is not a natural depression you will need to dig one in a location where water flows naturally. You can put in pipes or trenches to direct the water where you want it.

Next, have a perc test done to determine how quickly water soaks into your soil. If it stands more than three days, you'll need to improve the drainage in the basin by adding gravel, sand and compost to the bottom. After you have your rain garden positioned and are sure that it is going to work properly, you can begin to design the plantings.



This diagram shows a cross-section of a typical rain garden.
Image courtesy *Rain Garden Handbook for Western Washington Homeowners*.

There are three planting zones in a rain garden. The bottom, which is often very wet, requires plants that can tolerate wet feet for several months out of the year but can also stand to dry out in the summer. Plants like red twig dogwood, ninebark, and Douglas spirea or steeplebush are good choices. Farther up the basin incline where it stays wet only for a few months, usually from November though February, you can plant such natives as Western serviceberry and hazelnut (*Corylus cornuta*), mock orange and rhododendron PJM. The upper edge of the garden is the driest and plants that prefer well-drained, drier soil will be happiest there. Strawberry tree, Garry oak and Oregon grape—both tall- and low-growing

varieties—are suited to that location.

For more detailed information on building your rain garden, you can find a free publication, Rain Garden Handbook for Western Washington Homeowners, written by Curtis Hinman and produced by the WSU Pierce County Extension, online at www.pierce.wsu.edu/water_quality/lid/.

Increasing interest in storm water management gives us all the chance to contribute to the preservation of a precious natural resource, rather than treating it like a waste product to be flushed away in a storm sewer.

RAIN GARDENS WORKSHOP

- **What:** "Is a Rain Garden for You?" — a free WSU Know & Grow workshop, will teach you how to create a rain garden with appropriate plantings to absorb and cleanse storm water in your yard. Presented by WSU/Skagit County Extension Master Gardeners, in partnership with the WSU/Northwestern Washington Research and Extension Center.
- **When:** 1:00 to 2:30 p.m. Tuesday, March 18
- **Where:** WSU-Northwestern Research and Extension Center Auditorium Greenhouse, 16650 Highway 536, west of Mount Vernon
- **Speakers:** Dr. Curtis Hinman, Water Resource Educator from WSU Pierce County Extension and author of *Rain Garden Handbook for Western Washington Homeowners*; and Bryn Kremling, WSU Skagit County Extension Master Gardener
- **Learn more:** To suggest an idea or topic for a future WSU Know & Grow workshop, call 360-428-4270.