



Community
Development

Residential Rain Garden

What is a Rain Garden?

A rain garden ([BMP T5.14](#)) is a shallow landscaped area that collects, absorbs, and filters stormwater runoff from roof tops, driveways, and other hard surfaces. Full guidance and useful information can be found in [Rain Garden Handbook for Western Washington](#).

Where can a Rain Garden be Located?

Several things affect the placement of a rain garden – locate your rain garden in accordance with the following

- Minimum 10' from property lines
- Minimum 10' from another infiltration BMP
- Minimum 10' from structures with a basement (5' for structures without a basement)
- Minimum 30' from an on-site septic system, where the rain garden is uphill from the septic system
- Minimum 10' from an on-site septic system, where the rain garden is to the side or downhill from the septic system
- Minimum 100' from any open water features or designated landslide hazards
- Minimum 50' from any top of slope over 15%
- Minimum 200' from any top of slope 30% or greater (can be reduced with geotechnical evaluation)
- Rain gardens may not be installed on any slopes steeper than 20% without geotechnical evaluation

Other Considerations

- There must be a minimum 1' of separation between the bottom of the rain garden and both hardpan and seasonal high water table
- Utilities – to prevent extra expense and hazardous conditions, make sure to have all utilities located and marked before digging. Utility companies typically locate and mark power, gas, phone, water, and other lines or facilities. Contact utility locate services by dialing 811.
- Other constraints may apply. See [Kitsap County Stormwater Design Manual, Vol II, Chapter 5](#) for more information.

What Soil is Required?

On-site analysis of the soil is needed to test the infiltration feasibility of the rain garden and to obtain soil infiltration rate. A minimum of 0.3 inch/hour of infiltration rate is required for rain gardens. See the [Simple Infiltration Test Worksheet](#) for instructions on how to perform an infiltration test.

Kitsap.gov/DCD
(360) 337-5777

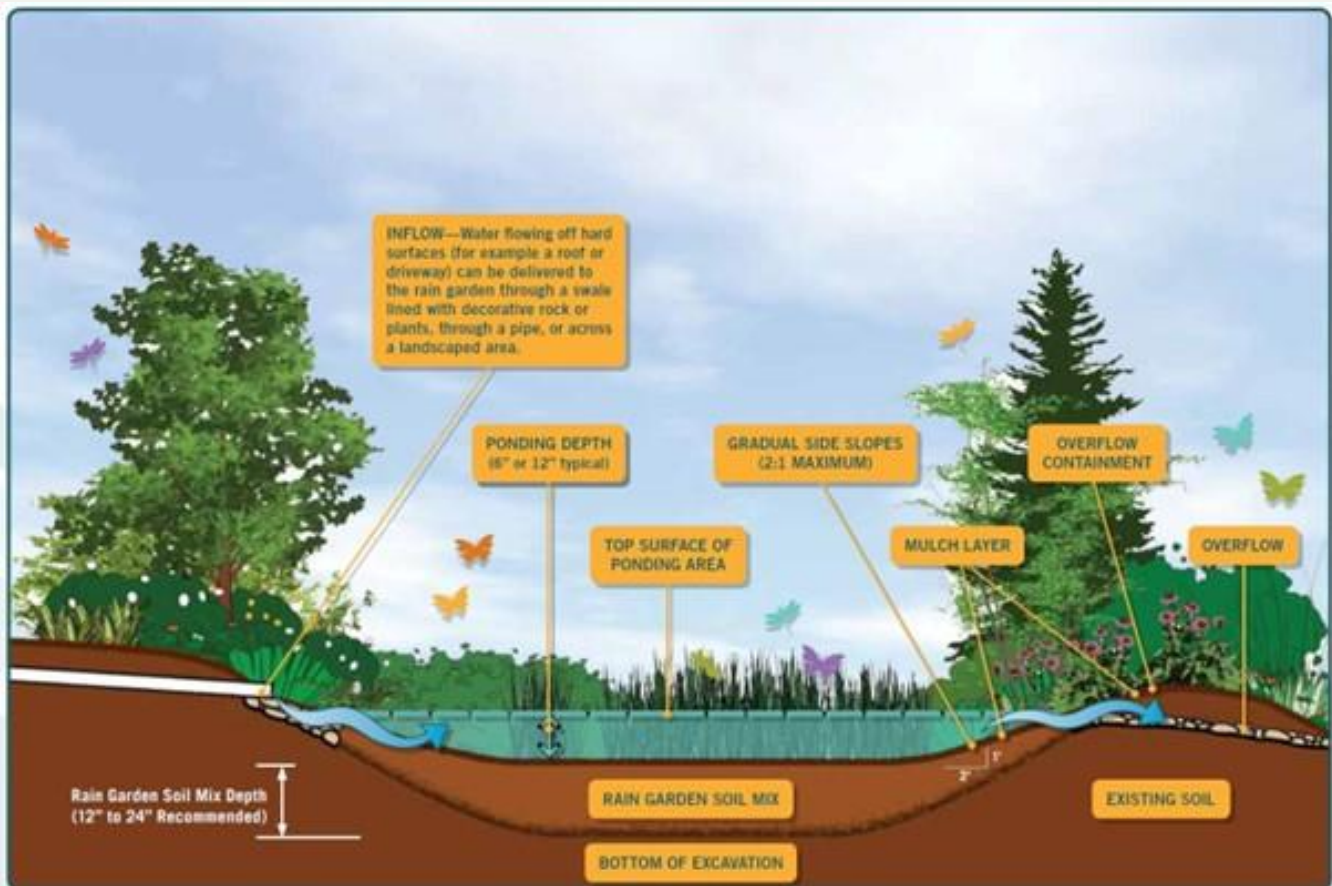
Help@Kitsap1.com

Revised 1/22/2025

What is the Size of a Typical Rain Garden?

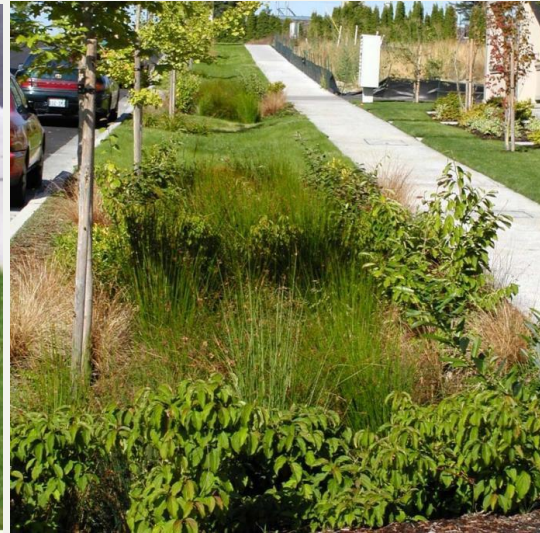
Rain gardens shall have a horizontally projected surface area below the overflow which is at least 5% of the total impervious surface area draining to it. For instance, the area of rain garden for a 2000 square feet roof is 100 square feet.

For better performance of your rain garden, you could increase the size to 10-30% of the contributing impervious area. More details on sizing the rain garden are described on [Rain Garden Handbook for Western Washington](#).



Profile view of a rain garden

Picture from Rain Garden Handbook for Western Washington



Rain gardens can be constructed in a variety of shapes and have diverse planting schemes.

Source and credits: Statewide LID training program by Department of Ecology

Planting Zones

Rain gardens have three planting zones. Zone 1 is the bottom of the rain garden—the wettest area. Zone 2 covers the side slopes, which occasionally may become wet. This zone requires plants to help stabilize the slopes. Zone 3 covers the area around the perimeter of the rain garden and/or on the berm, where plants will grow in drier soil.

SUGGESTED PLANTS

ZONE 1

Emergents Dagger-leaf rush (*Juncus ensifolius*), and taper-tipped rush (*Juncus acuminatus*)

Herbaceous Perennials Henderson's checker-mallow (*Sidalcea hendersonii*)

Deciduous Shrubs Dwarf red-twig dogwood (*Cornus sericea* 'Kelsey'), Pacific ninebark (*Physocarpus capitatus*), and Bloodtwig dogwood (*Cornus sanguinea* 'Midwinter Fire')

ZONE 2

Herbaceous Perennials Daylily (*Hemerocallis* spp.) and giant camas (*Camassia leichtlinii*)

Deciduous Shrubs Dwarf red-twig dogwood (*Cornus sericea* 'Kelsey'), snowberry (*Symphoricarpos albus*), and Hancock coralberry (*Symphoricarpos x chenaultii* 'Hancock')

Evergreen Shrubs Boxwood honeysuckle (*Lonicera pileata*) and dwarf tall Oregon grape (*Mahonia aquifolium* 'Compacta')

ZONE 3

Ornamental Grasses *Miscanthus sinensis* 'Morning Light' and switch grasses (*Panicum virgatum* 'Heavy Metal,' and 'Shenandoah')

Deciduous Shrubs Oceanspray (*Holodiscus discolor*), red-flowering currant (*Ribes sanguineum*), and snowberry (*Symphoricarpos albus*) set back from the grasses to fill in

Evergreen Shrubs Tall Oregon grape (*Mahonia aquifolium*)

Deciduous and Evergreen Trees and Large Shrubs Western serviceberry (*Amelanchier alnifolia*), Oceanspray (*Holodiscus discolor*), and dwarf strawberry tree (*Arbutus unedo* 'Compacta')

A sample planting plan adapted from Rain Garden Handbook for Western Washington.

More guidance for plant selection can be found from A-13 to A-18 in that handbook.