



## VOLUNTARY CURBSIDE RAIN GARDENS

Last Revised December 27, 2016

Curbside rain gardens are small, shallow, planted depressions that collect and filter runoff from adjacent paved sidewalks. They can be located in the planting strip between the sidewalk and curb on non-arterial streets.

Rain gardens collect and filter runoff and help rainwater soak into the soil. This process helps keep polluted runoff out of Seattle's waterways. Rain gardens planted with native plants benefit urban habitat, beautify the streetscape, and serve as a planted buffer between the sidewalk and street, creating a safe and pleasant place for people to walk.

The Seattle Department of Transportation (SDOT) Street Use division issues free permits for homeowners who wish to install voluntary curbside rain gardens. This Client Assistance Memo (CAM) addresses siting criteria, design guidelines, and the permitting process for voluntary curbside rain gardens.

Please note that voluntary curbside rain gardens do not fulfill any Seattle [Stormwater Code](#) requirements, and are not eligible for incentive or credit programs. If you plan on installing facilities for Seattle [Stormwater Code](#) or the [Seattle Green Factor](#) program, follow the [Street Improvement Permit \(SIP\)](#) process (see [CAM 2200](#)).

*Note: This CAM does not cover rain garden installations on streets without sidewalks and curbs. These proposals must follow the Street Improvement Permit process.*

### DESIGN

#### Location

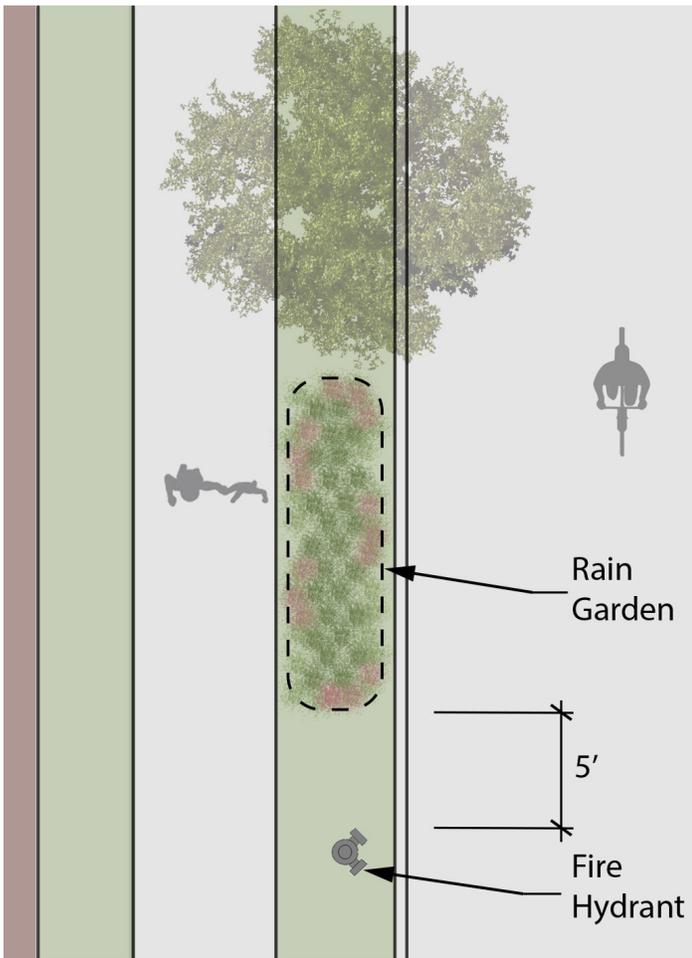
Before you design a voluntary curbside rain garden, verify that:

- Your site is located in a planting strip on a non-arterial street with an existing sidewalk and curb
- The street slope is less than 5%
- The planting strip is at least 5 feet wide
- The sidewalk is at a higher elevation than the curb and gutter
- The site does not have a steep slope, shallow-lying bedrock, high groundwater, or contaminated soil
- The site is feasible for infiltration. Check the "Infiltration Evaluation Not Required" layer on the [Seattle Department of Construction and Inspections GIS Map](#). If the site is within an area that is mapped, a voluntary rain garden is **not** permitted.
- The soil drainage rate is adequate for infiltration – you can test this using the method described in the [Rain Garden Handbook for Western Washington Homeowners](#). The drainage rate must be at least 0.3 inches per hour.
- The project does not conflict with underground utilities or large tree roots. Call **811** to request the location of all nearby underground utilities.

#### Access to Information

Client Assistance Memos are available online at: [www.seattle.gov/transportation/stuse\\_home.htm](http://www.seattle.gov/transportation/stuse_home.htm). Paper copies of these documents are available at our Permit Services Counter located on the 23rd floor of the Seattle Municipal Tower at 700 5th Avenue in downtown Seattle; phone number (206) 684-5253.

**LEGAL DISCLAIMER:** This Client Assistance Memo (CAM) should not be used as a substitute for codes and regulations. The applicant is responsible for compliance with all code and rule requirements, whether or not described in this CAM.



## Design

Your rain garden design should follow these guidelines:

- The rain garden should be located at least 10 feet from all building foundations
- Provide a minimum 5-foot setback from utility poles, vaults, meters, and fire hydrants
- The infiltration surface area, or bottom of the rain garden, should be 5 to 10% of the area of paved sidewalk draining to the rain garden
- The maximum ponding depth is 3 inches
- Plants should have a maximum mature height of 3 feet
- Plants within 10 feet of a driveway should have a maximum mature height of 30 inches (see [CAM 2204](#))
- Plants within 30 feet of an intersection should have a maximum mature plant height is 24 to 30 inches (see [CAM 2305](#))

For additional guidance on designing and installing your rain garden, refer to the [Rain Garden Handbook for Western Washington](#).

## VEGETATION

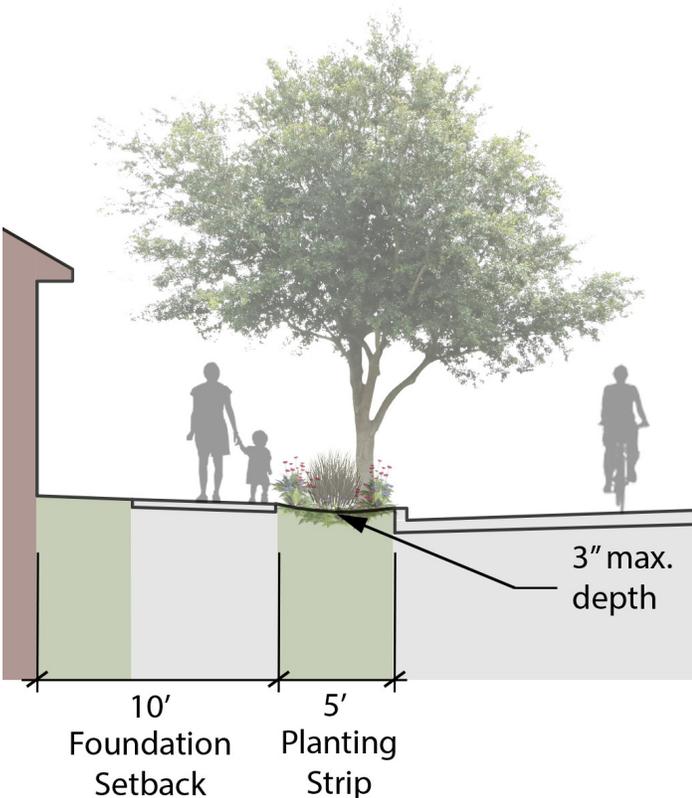
### Street Trees

Trees growing in the right of way are protected by [Seattle Municipal Code 15.43](#). Existing street trees may be compatible with rain gardens in some cases, but care must be taken to avoid injuring any street tree. Changes in soil type, grade, and/or water infiltration can cause short- and long-term health problems for trees. If there are street trees in or near where you'd like to install a rain garden, please note them on your site plan.

We encourage you to plant new street trees in rain gardens. Trees help minimize runoff when leaves intercept rainfall. Detailed guidance on planting and maintaining street trees is available in SDOT's [Street Tree Manual](#).

### Plant Selection

We recommend including native vegetation in your plant palette. Plants should include those that tolerate dry summer weather as well as periods of heavy rain during the fall and winter. For plant recommendations, refer to the [Seattle Green Factor Plant List](#). Remember that planting strips are shared public spaces, so it's important to choose plants that will not obstruct the sidewalk or reduce visibility at intersections and driveways. Plants should have a



maximum mature height of 36 inches, or less than 30 inches tall if your site is located within 10 feet of a driveway or 30 feet of an intersection (see [CAM 2305](#)).

## APPLICATION PROCESS

### Rain Garden

To apply for a Street Use permit, you will need to submit the following materials at the Street Use Permit Services Counter:

- A completed [Street Use Construction Permit Application](#) form
- A [Right of Way Impact Site Plan](#). Detailed guidance on preparing a site plan is available in [CAM 2116](#).
  - Draw the length and width of the proposed rain garden location
  - Note the square feet of paved sidewalk area draining to the rain garden
- A cross-section with dimensions, showing:
  - The width of the sidewalk and height of the curb
  - The location of the right of way and property line
  - The width and depth of the proposed rain garden
- A list of plants potentially being used
- An [Urban Forestry Application](#) for projects that propose to prune, remove, or add new street trees

## INSTALLATION

If you need to use any parking spaces during installation to stage equipment or materials, you'll need to place [Temporary "No Parking" Signs](#) in those spaces 72 hours before you need to use them (see [CAM 2114](#)).

All excavation work should take place during the dry season (May 1 to September 30). Erosion and sediment control must be in place during construction work to prevent erosion and debris flowing into the City's drainage system. Guidance on erosion and sediment control measures is available in the City of Seattle [Stormwater Manual](#).

If there is an established tree in the planting strip, protection fencing should be placed in a minimum 4-foot diameter area around the trunk. Construction materials and equipment should not be placed in this area. See the [Street Tree Manual](#) to learn more about how to protect existing street trees.

Planting in spring (mid-March to June) or fall (late September to October) is recommended to take advantage of natural rainfall. You will need to water adequately to establish the plants. Apply a 2- to 3-inch layer of mulch to help suppress weeds and conserve soil moisture. See the [Rain Garden Handbook for Western Washington](#) for guidance on installation and planting.

## MAINTENANCE

[Seattle Municipal Code 10.52.030](#) requires the adjacent property owner to maintain the vegetation in the planting strip adjacent to their property. Like any landscape feature, rain gardens must be cared for. Plants will need watering for two to three summers until their root systems are established. Weeding, mulching, and replacing diseased or dead plants should be done in the spring and fall. For help, refer to the [Rain Garden Handbook for Western Washington](#) and [Rain Garden Care Guide](#).

If the rain garden fails to drain, resulting in standing water for 72 hours or more after a heavy rainfall, the City will require the adjacent property owner(s) or responsible party to remove the rain garden and restore the right of way to the condition that existed before it was installed. The City is not responsible for maintaining voluntary rain gardens.

## RELATED LINKS AND ADDITIONAL RESOURCES

Call Before You Dig: <http://call811.com/>

City of Seattle Stormwater Code: [www.seattle.gov/dpd/codesrules/codes/stormwater/default.htm](http://www.seattle.gov/dpd/codesrules/codes/stormwater/default.htm)

City of Seattle Stormwater Manual: [www.seattle.gov/dpd/cs/groups/pan/@pan/documents/web\\_informational/p2358283.pdf](http://www.seattle.gov/dpd/cs/groups/pan/@pan/documents/web_informational/p2358283.pdf)

Client Assistance Memos (CAMs): [www.seattle.gov/transportation/stuse\\_docs.htm](http://www.seattle.gov/transportation/stuse_docs.htm)

Rain Garden Care Guide: [www.12000raingardens.org/wp-content/uploads/2013/03/RainGardenCareGuideComplete.pdf](http://www.12000raingardens.org/wp-content/uploads/2013/03/RainGardenCareGuideComplete.pdf)

Rain Garden Handbook for Western Washington Homeowners: <https://fortress.wa.gov/ecy/publications/documents/1310027.pdf>

Rain Garden Planting Plans: [www.700milliongallons.org/wp-content/uploads/2015/06/RainWise\\_PlantingPlan\\_16.pdf](http://www.700milliongallons.org/wp-content/uploads/2015/06/RainWise_PlantingPlan_16.pdf)

Right of Way Impact Site Plan Templates: [www.seattle.gov/transportation/stuse\\_forms.htm](http://www.seattle.gov/transportation/stuse_forms.htm)

SDOT Street Use Applications, Forms & Templates:

[www.seattle.gov/transportation/stuse\\_forms.htm](http://www.seattle.gov/transportation/stuse_forms.htm)

Seattle Green Factor Plant List: [www.seattle.gov/dpd/cs/groups/pan/@pan/documents/web\\_informational/dpds021347.pdf](http://www.seattle.gov/dpd/cs/groups/pan/@pan/documents/web_informational/dpds021347.pdf)

Seattle Municipal Code (SMC): [10.52.030](#), [15.43](#)

Street Improvement Permit: [www.seattle.gov/transportation/stuse\\_sip.htm#PlanPrep](http://www.seattle.gov/transportation/stuse_sip.htm#PlanPrep)

Temporary No Parking Zone Information:

[www.seattle.gov/transportation/parking/tempnoparking.htm](http://www.seattle.gov/transportation/parking/tempnoparking.htm)

Traffic Control Manual for In-Street Work:

[www.seattle.gov/transportation/trafficcontrolmanual.htm](http://www.seattle.gov/transportation/trafficcontrolmanual.htm)

SDOT Street Tree Manual: [www.seattle.gov/transportation/forestry.htm](http://www.seattle.gov/transportation/forestry.htm)

Property owners may be eligible for a RainWise rebate in some areas of Seattle. The rebate covers up to 100% of costs associated with installing a rain garden or cistern on private property to capture water from the roof of their home or building. To learn more, visit [www.rainwise.seattle.gov](http://www.rainwise.seattle.gov).