

What is a rain garden?

When rain falls on hard surfaces such as roofs or driveways, the water runs off rapidly, often taking pollutants with it. These pollutants end up in our local streams, which drain into the Puget Sound. The combined effect of rapidly changing water levels and pollutant runoff causes a lot of damage to our local stream and marine ecosystems.

A rain garden is a multi-purpose landscape feature that mimics the action of a healthy wetland or forest. A well-designed rain garden temporarily holds runoff, absorbs the water like a sponge, and naturally filters out pollutants as the water seeps slowly into the ground.

Rain gardens can be quite beautiful and provide excellent wildlife habitat. They can also serve to divert water away from poorly-drained areas. If you have the right conditions, building a rain garden can be a great way to reduce your environmental impact while adding natural beauty to your landscape.

Some cities, including Shoreline and Seattle, offer rebate or incentive programs for home rain gardens. **Each city has its own rules and regulations, so be sure to check them out before planning your project.**

Is a rain garden right for me?

Installing a well-designed rain garden can be a pretty big project! You'll need to do your research, take some measurements, and plan carefully.

Building a rain garden involves excavating a substantial area and importing specially blended soil, as well as carefully selecting appropriate plants. Rain gardens aren't the right choice for every location, nor do they work for every homeowner. Unfortunately, a poorly designed rain garden could do more harm than good.

Some homeowners hire a contractor to help plan and build their rain gardens. Seattle residents **must** go through a qualified contractor in order to qualify for rebates; a database is available on the Seattle website.

Here are some factors to consider to decide if a rain garden is right for you:

- **Slope:** Rain gardens should ideally be built on fairly level ground. Consult with a geotechnical engineer before building a rain garden on a slope of greater than 10%.
- **Existing soil:** Before planning your rain garden, you'll need to test your soil texture and drainage. This will help you determine the size of your rain garden and what soil to use. These are simple tests that you can perform yourself (described in the Rain Garden Handbook from WSU—see resources at end).
- **Existing vegetation:** Healthy planted landscapes, especially natural areas, already do a great job of absorbing and filtering rainwater, so you wouldn't want to disturb them for your project.
- **Space:** If you live in or near Seattle and have well-drained soil, the surface area of your rain garden will need to be at least 6-10% of the total impermeable surface area that drains into it. Depending on your rainfall and soil conditions, it may need to be quite a bit larger. Fortunately, you can adapt the shape of the garden however you like to suit your landscape.
- **Distance from buildings, utilities, septic systems, and wells:** To prevent damage, rain gardens should be at least ten feet from any building foundations. They should not disrupt access to utility lines, and they should be at least 50 feet from septic systems and 100 feet from wells.

Conservation landscaping

If a rain garden isn't right for you, or if you want to do even more to reduce your impact and improve habitat, **conservation landscaping** is another great option. Conservation landscaping means replacing some of your less permeable surfaces – such as patios or lawns – with compost-amended soils and deep-rooted native plants. Conservation landscapes provide many of the same benefits as rain gardens, and are much easier to install. They can be good alternatives for areas that aren't well-suited to rain gardens, such as on slopes or in poorly drained soil. The city of Shoreline offers rebates for conservation landscaping as well as rain gardens, and it is possible to participate in both programs at once.

Plants for rain gardens and conservation landscaping

Regardless of whether you are creating a rain garden or a conservation landscape, you'll want to focus on diverse plants that are native to this region. It's okay to integrate some non-native plants, but natives are best for water storage and wildlife habitat. When integrating non-native plants, be sure to avoid anything that could become invasive.

There's nothing wrong with deciduous plants, but make sure to incorporate at least some evergreens. Not only will these keep your garden looking interesting and beautiful in the winter, they'll also provide a year-round canopy to help capture and slow falling rain.

As with any planting project, you'll want to choose the right plants for the right place. Consider sun exposure, rainfall, soil conditions, long-term maintenance needs, additional benefits such as creating shade or wildlife habitat, and your unique aesthetic preferences when selecting plants.

When building a rain garden, you'll want to select plants for each of three "zones."

- **Zone 1:** The bottom of your rain garden. These plants will sometimes be inundated, and may stay wet for long periods of time. This is a good place for plants such as red twig dogwood and sedges.
- **Zone 2:** The sloping sides of the garden. These plants will need to tolerate wet conditions for short periods of time, and they should have strong root systems to stabilize the slopes. Good plant choices for this zone include salal, red-flowering currant, and vine maple.
- **Zone 3:** The upper perimeter of the garden. These plants will grow in more average moisture conditions, so you have a lot of options. A few good choices include ninebark, Oregon grape, and perennial flowering plants such as echinacea.

Resources:

[Rain Garden Handbook for Western Washington](#) is available as a free pdf on the three websites below.

City of Seattle "rainwise" program: (including rebate information and a database of rain garden contractors) <https://www.700milliongallons.org/rainwise/>

City of Shoreline "soak it up" program: <http://www.shorelinewa.gov/government/departments/public-works/surface-water-utility/get-involved/soak-it-up-rebate-program>

Residents of other cities or of rural or unincorporated areas, look for your county contact on the WSU rain garden site: <https://extension.wsu.edu/raingarden/>