CATCHING RAIN:

Key Maintenance Tips for Rain Gardens



As someone concerned about the upkeep of a rain garden (or bioretention facility), you are on the front lines for protecting water in your community. A rain garden is different from typical landscapes. It may even be a regulated stormwater facility, and you may need to check with your local jurisdiction to see what level of maintenance is required. The tips below outline the key maintenance concerns. Find more resources, including the *Rain Garden Handbook for Western Washington*, at http://raingarden.wsu.edu.

Controlling Weeds

1. Know Your Plants

- Learn which plants are supposed to be there and which aren't by communicating with the landowner or the person who developed the rain garden.
- If possible, get a copy of the original planting plan or plant list to help you.
- If you begin maintenance soon after the rain garden is installed, take photos as a helpful reminder of the original plan.
- Some rain garden plants might look like unwanted spreading grasses, but they are beneficial rushes and sedges that will spread over time and fill in the bottom of the rain garden—and that's a good thing, because a rain garden full of healthy plants helps keep our local waterways clean!

2. Weed Early & Often

- Pull weeds regularly to keep them from spreading or going to seed.
- Be careful not to step on the hard-to-see new plants.
- As the rain garden matures, the beneficial plants will fill in and eliminate the amount of weeding required, though some weeds will still pop up, of course.
- Maintain sharp edging with turf borders to prevent lawn grasses from spreading into rain garden.
- Never use herbicides/pesticides in the rain garden!

Maintaining Mulch

A newly planted rain garden should have mulch between the plants. The mulch may be coarse wood chips or coarse compost, or a combination of mulches for different parts of the garden. Mulch helps prevent weeds, prevent erosion, and reduce watering needs.

- Check the mulch and replenish it when needed.
- Spread by hand to avoid damaging plants.
- It should be 2 to 3 inches thick between plants, with no bare soil showing.
- The mulch should be lightly applied right around the base of plants, and not touching woody stems.
- Less mulch will be needed over time as the rain garden fills in and there are smaller spaces between plants.

Maintaining Inlets & Exits

The parts of the rain garden where water goes in or out should have cobbles or drain rock or some other material—referred to as "armoring"—to prevent erosion from the water flow. In some, there might be raised overflows covered with a grate.

- Sometimes the armoring gets moved after heavy storms. Check to be sure it is still thickly applied—you should see no bare soil below.
- The armoring should be clean. If you see silt or mud on top of the armoring, this will have to be removed, and it may be a sign that sediments are flowing into the garden. Find the sediment source and prevent it from entering the garden in a way that won't impact the flow of stormwater into the garden.
- Always check any inflow pipes to be sure nothing is blocking the free flow of water into the garden.
- Clean fallen leaves off of overflow grates and keep plants trimmed back to prevent blocking.

Maintain Healthy Plant Coverage

- To work properly, the rain garden should have dense plant coverage (80-100%) in the bottom.
- If plants die, they will need to be replaced with others that will be more successful.
- Note plant health and vigor at each visit; address any concerns before they become more problematic.

 Continued >

Look for the other helpful fact sheets in this series:

- 1. Low Impact Development
- 2. LID Stormwater Regulations
- 3. LID Development Process
- 4. Pavement Maintenance
- 5. Rain Garden Maintenance
 - 6. Rain Garden Construction Checklist
 - 7. Rain Garden Construction Sequencing



Hand weeding early on will prevent weeds from getting away from you. Never use chemical weed control in a rain garden.

Photo: Erica Guttman



Mulching bare soil prevents weeds and reduces irrigation needs. As plants fill in, less mulch will be needed. Photo: Erica Guttman

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Handling Storm Damage

Following a severe storm with wind, ice, or snow, take the following precautions:

- Carefully clear heavy snow deposits that might restrict the inflow or overflow of the rain garden; be careful not to disturb the drain rock or other material that prevents erosion. Let other snow melt naturally.
- Remove deposits of large branches or other debris that might affect the plants' growth, being careful to avoid crushing beneficial plantings.
- Wait until snow has melted so you can see the rain garden plants before removing debris, or you
 may crush or break beneficial plants. The branches of trees and shrubs are especially brittle and
 easily broken when encrusted in ice.

Irrigation

- Rain gardens should be planted with species that are drought tolerant after the first two to three summers.
- For the first summer, set the irrigation schedule so plants are watered deeply but infrequently: once or twice per week during the driest times.
- For the second summer, set the irrigation schedule so plants are watered deeply and even less frequently: once every two weeks (a little more in the hottest weeks and less in the cooler weeks).
- By the third summer, plants should be fairly well established, but may need water every 4 to 6 weeks during the driest times.
- Very fast-draining soils might require more frequent irrigation.
- More extensive deep watering may be required during times of extended drought and heat spells, even after establishment.
- Plants that aren't drought tolerant should be planted together and placed in their own irrigation zone.

Pruning & Cutting Back

- Plants should be permitted to achieve their expected height.
- If plants are too tall for the site requirements, remove them and replace them with lower-growing selections.
- Use **thinning** cuts, not heading cuts—these will encourage extra bushy growth. (For more details, refer to pruning guidelines from experts.)
- Over time, large woody plants can be selectively pruned to allow groundcovers to fill in around their base.
- Plan to cut back ornamental grasses and perennials in late winter. You'll avoid trampling smaller plants and avoid cutting off the developing flowers of the grasses.

Address or Report Problems

Good communication between property owners, managers, and maintenance staff is key to rain gardens working properly for the long term. The following problems should be fixed right away, and guidance should be sought from property managers, local stormwater-management professionals, local conservation districts, and local WSU Extension offices if necessary. Always address:

- mud or silt in the garden
- vandalism
- plants turning yellow or looking sick there may be a problem with the compost or someone adding toxics
- · failing irrigation

- broken pipes
- plants dead or dying
- plants placed in the wrong location for their needs (such as shade plants placed in the sun)
- · anything else that doesn't seem right to you



Clear rain garden inflows and overflows of storm debris, but be careful not to work inside the garden until more snow has melted so you don't trample plants accidentally.

Photo: Erica Guttman



It's important to keep inflows and overflows clear of litter and vegetation.

Photo: Erica Guttman



Maintain healthy plant coverage on the bottom of the rain garden so it manages polluted runoff effectively.

Photo: Erica Guttman





Thanks for sharing this information and doing your part to help protect water for your whole community!