

Sizing a Rain Garden Worksheet*

To size a rain garden, you will need to measure your drainage area, determine the percent slope of your lawn, and identify your soil type. This worksheet will walk you through these steps. Use Earth Partnership for Schools activities, "Identifying Your Soil for Rain Gardens" and "Measuring Slope for Rain Gardens" to determine your soil type and percent slope.

1. Drainage Area: Measure your drainage area.

- a. Roof area: _____ feet X _____ feet = _____ square feet
- b. Lawn area: _____ feet X _____ feet = _____ square feet
- c. Paved surfaces: _____ feet X _____ feet = _____ square feet
- d. Total drainage area: _____ **square feet**

2. Rain Garden Depth: Find the slope of your rain garden site to determine how deep to dig your garden.

- a. Less than a 4% slope = 3 – 5 inch deep rain garden
- b. 5 – 7% slope = 6 – 7 inch deep rain garden
- c. 8 – 12% slope = 8 inch deep rain garden

_____ **inches deep**

3. Soil Type: Determine your soil type.

- a. Soil Type: (*Please circle*) sand silt (loam) clay

4. Soil Factor: Use the appropriate table below to find your soil factor. The soil factor is derived from soil type and rain garden depth.

- a. Soil factor: _____

Table #1: Rain gardens up to 30 feet from a downspout.

	3 – 5 inches deep	6 -7 inches deep	8 inches deep
Sandy soil	0.19	0.15	0.08
Silt/loam soil	0.34	0.25	0.16
Clayey soil	0.43	0.32	0.20

Table #2: Rain gardens more than 30 feet from the downspout.

Sandy soil	.03
Silt/loam soil	.06
Clayey soil	.20

5. Rain Garden Size: Multiply total drainage area (#1) by the soil factor (#4).

_____ (sq ft.) total drainage area X _____ soil factor = _____ **(sq ft.) rain garden**

*Based on Rain Gardens: A how-to manual for homeowners