Rain Garden Sizing Worksheet

*(See **Sizing Exercise** for explanation of how the below calculations were derived)*

To determine the total size (in square feet) of your rain garden, complete the following:

1. Total impervious surface draining to rain garden = __X__ ft^2
   (Calculate this figure (X) using Green Up DC (http://greenup.dc.gov) – in most cases, this will simply be the roof area that drains to the downspout that will be directed into your rain garden)

2. Calculate the volume your rain garden will need to hold in a 1.2" rain storm:

   Volume = __X__ ft^2 *(from Step 1)* x .1 = __Y__ ft^3

3. Calculate the surface area you will need for your rain garden:

   Surface area = $\frac{\text{Y } ft^3 \text{ (from Step 2)}}{1.1}$ = __Z__ ft^2

   Your rain garden will need to be at least __Z__ ft^2.

Example:

For this sample calculation, the roof area that will drain through the downspout to the rain garden is a total of 520 ft^2.

1. Total impervious surface area draining to rain garden = **520** ft^2
2. Volume = **520** ft^2 x .1 = **52** ft^3
3. Surface area = $\frac{\textbf{52 } ft^3}{1.1}$ = **47.3** ft^2

This rain garden needs to be at least 47.3 ft^2 to handle a 1.2" rain event.

Optional: Calculate the volume of stormwater your rain garden can hold.

Y ft^3 *(from Step 2)* x 7.48 = V gallons

Your rain garden can hold a total of V gallons of stormwater.