Harford Streams

Calculating Rain Garden Volume and Materials

AREA is Length x Width = Square Feet (sq.ft. or Ft^2)

VOLUME is Length x Width x Depth = Cubic Feet (cu.ft. or Ft^3)

NOTE: If ordering from contractors (mulch, sand, stone, etc.), convert your answer from Cubic Feet to Cubic Yards (cu.yd. or Yd^3) by dividing your Cubic Feet answer by 27.

Determine/Select the dimensions of your rain garden:

1) Determine the surface area (sq ft) of your proposed rain garden: _____

2) Select the ponding depth (generally .5 ft or .75 ft): _____

3) Select the mulch layer depth (generally .25 ft or .3 ft): _____

4) Select the biosoil layer depth (generally 1 ft): _____

5) Total depth of your rain garden: (2) + (3) + (4) = _____

Determine materials to be removed:

6) Calculate the volume of material to be removed/disposed: (1) x (5) =_____
    a. Convert to cu.yd: (6)/27:_____

Determine materials needed:

7) Calculate the volume of mulch needed: (1) x (3) =_____
    a. Convert to cu.yd: (7)/27:_____

8) Calculate volume of biosoil needed: (1) x (4) =_____
    a. Convert to cu.yd: (8)/27:_____

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