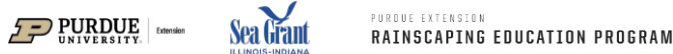


Sizing Your Rain Garden

1. Determine the depth from infiltration test.
 - a. Average rate of water infiltration (inches of water/hr.) divided by 24 hours to calculate the depth.
 - b. Rain garden should be sized to infiltrate a 1-inch rainfall event in 24 hours or less and be no deeper than 12 inches.



HIDDEN SLIDE — Example: Calculate Infiltration

Time	Depth Below Marker	Infiltration Rate (since start) (Decimal Depth/Time)
1 hour	1 inch	1 inch/hour
2 hours	2 inches	1 inch/hour
3 hours	No measurement	
4 hours	3 inches	0.75 inch/hour

Overall Rate: 0.75 inch/hour

Depth of Infiltration in 24 hours 18 inches

Purdue University is an equal opportunity institution.

2. Determine the size of surface to drain (usually roof or sidewalk)
 - a. Can pace it off or a measuring tape.
 - b. Area equals length in ft. x width in ft.
 - c. Rainscaping Video showing infiltration test demonstration:
<https://www.youtube.com/watch?v=r7kyagywAS8&t=3s>
3. Determine area of new rain garden:
 - a. Size in square feet of area to be drained divided by the depth of your rain garden.
 - b. The residential home roof is 1500 square feet, and they will build a 10-inch-deep rain garden. What is the area needed?
 - i. 150 square feet
4. Helpful resources:
 - a. <https://websoilsurvey.nrcs.usda.gov/app/>
 - b. <https://casoilresource.lawr.ucdavis.edu/soilweb-apps>
 - c. <https://indiana811.org/>