

CBLP Level 1 Summer 2020

Rain Garden Calculations Exercise

Please complete this exercise after watching the preclass videos for Day 2. Be prepared to discuss this in class.

You are designing a very simple rain garden that will collect runoff water from a residential driveway that is 30' x 20'. This asphalt driveway is the entire drainage area for the rain garden.

What is the amount of water (volume in gallons) that the rain garden will need to hold from a 1" storm? Please show your calculations.

Assumptions: Runoff coefficient for the driveway (C) = 0.90 1 cu ft = 7.48 gallons Use the equation: Runoff volume (cf) = Area (sf) x C x depth (in) x 0.083