COUNTY OF SAN DIEGO

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WATERSCAPE
REBATE PROGRAM

Soil Drainage Test

A soil drainage test measures how quickly water seeps into the soil, which determines the soil's ability to absorb rainfall and other water sources. Designing the right size of stormwater management project (like rain gardens and porous pavements) in your yard depends on knowing how quickly water infiltrates in your soil.

Soil Drainage Test: Part 1

1. Dig a one-cubic-foot hole (12”x12”x12”) in the area you would like to install your garden or stormwater retention feature.
2. Fill the hole with water and allow it to drain once, which may be overnight.

Soil Drainage Test: Part 2

1. Refill the hole with water and place a stick horizontally across the top.
2. Use a measuring tape or ruler to measure the distance from the bottom of the stick to the top of the water.
3. Wait one hour and measure the same distance again.
   - This can be repeated every hour with the results averaged.
   - *Example: Six inches of total infiltration in three hourly readings is 6 ÷ 3 = 2 inches per hour.*
4. Record your rate of infiltration in inches per hour here: _____

Takeaways for Participants

1. If infiltration is less than 1” per hour, consider a container project instead of a garden or work with a landscape professional to protect your property when building a rain garden.
2. If infiltration is more than 3” per hour, amend the soil with 10% to 30% high-quality compost to increase water absorption. This will maximize the water storage capacity for plants to use.