



GREEN INFRASTRUCTURE in New Jersey



PRACTICES

GREEN INFRASTRUCTURE PRACTICE: RAIN GARDEN/BIORETENTION BASIN

Rain gardens are landscaped, shallow depressions that capture rainwater and allow it to percolate slowly into the ground. Large rain gardens are called bioretention basins.

HOW IT WORKS:

Stormwater flows into the rain garden where it is temporarily stored. The plants in the rain garden take up some of this rainwater, and the rest infiltrates the soil. Rain gardens are generally planted with more deeply rooted grasses and flowers than a traditional lawn, so water is able to drain more deeply into the soil, maximizing infiltration and groundwater recharge. Also, because runoff is collected in the rain garden instead of flowing directly into a storm drain, it has a chance to interact with the plants and soil, where pollutants can be broken down and filtered.

CONSIDERATIONS:

Rain gardens are best placed between two impervious surfaces, like between a downspout draining a roof and a sidewalk, so it can slow down and intercept runoff. Because infiltration of rainwater into the soil is one of the major purposes of rain gardens, it is important to make sure the soil in your rain garden is sandy enough. If it is not, it is important to add coarse sand to the soil to increase the amount of water that can be penetrated into the soil. Finally, it is best to choose native plants; native plants are accustomed to New Jersey's climate, so they are less likely to need fertilizer to thrive.

Additional information regarding the rain garden/bioretention design is available at www.njstormwater.org/bmp_manual2.htm.

