What is Bioretention?

Also known as **a rain garden**, a bioretention basin is a depression that has been filled with native plantings, a special soil mix, and landscape material. It is strategically located on a property to collect and treat stormwater runoff from developed (impervious) areas such as parking lots and rooftops.



Properly maintained and functional



Malfunctioning due to improper maintenance

Maintaining Your Stormwater Control Measure

Property owners are responsible for inspecting and maintaining SCMs on their property. Inspection and maintenance requirements for your specific SCM are filed with your property deed. These documents are available through the Metro Nashville Register of Deeds.

Typical Inspection and Maintenance Concerns Include:

- Observe the bed. Do the plants look healthy?
 Is there any erosion? Is there any trash? Does the mulch or stone need to be replaced? If so, the old layer of mulch or stone should be removed as to not reduce ponding volume.
- Inspect the outlet and inlets to ensure there is no sediment, trash, and/or vegetation growth which could result in a clogged outlet or inlet and improper draining.
- Is there evidence of water bypassing the bioretention basin?

- Visit the bioretention site within 48 hours of a rain storm, and see if there is ponding. If so, maintenance may be required.
- Avoid fertilizers and pesticides
- Avoid possibly compacting soil by not using heavy equipment, such as riding lawnmowers, on the basin
- If maintenance needs are identified during the inspection, ensure that service is performed in a timely manner to prevent larger problems from occurring in the future.

For more information, visit scm.nashville.gov or call Metro Water Services at (615)-880-2420



How does Bioretention work?



Stormwater runoff flows into the bioretention cell where most of the water infiltrates into an engineered soil made of sand, fines, and organic matter. Then the biological process of evapotranspiration occurs through plants within the cell. Excess water soaks into the surrounding soils and/or flows through underdrains to the stormwater conveyance system. Excess water from large storm events will safely flow out of the basin through the designated overflow structure.

Types of Bioretention Cells:



Large Commercial Basin



Streetscapes



Small Rain Gardens



Small Tree or Planter Boxes



