Best Management Practices (BMPs) Siting Tool

PURPOSE AND OBJECTIVE

- The Best Management Practices (BMPs) Siting Tool helps users identify suitable locations for implementing a range of BMPs for low-impact development (LID) alternatives.
- The BMPs and LIDs identified (e.g., constructed wetlands, grassed swales, green roofs) will help planners, developers, and architects manage the quantity, quality, and peak discharge of stormwater runoff events at a range of scales—from small lots to watersheds.

SOFTWARE AND DATA INPUT REQUIRED

- The tool requires Microsoft Visual Basic (Visual Studio 6.0), ArcGIS 10.1 with Service Pack 1 and Spatial Analyst extension, and a Windows 7 (32-bit or 64-bit) operating system.
- The data inputs required are raster files for digital elevation model, land use, and percent impervious; and shapefiles for soil properties, urban land use, roads, streams, groundwater table depth, and land ownership.

INFORMATION GENERATED

- The siting tool generates a spatial map that indicates both the types of BMP and the placement locations. Data outputs must be confirmed with a site visit to validate results.

EXPERTISE & TIME INVESTMENT REQUIRED

- Familiarity with ArcGIS software, data inputs, and basic knowledge of stormwater management and BMPs would be required to successfully use this tool.
- Labor and time required is minimal if data are readily available. However, the time investment increases proportional to the amount of data that needs to be gathered and organized for the analysis.

EXAMPLES OF COMPANY USERS

- The tool is relatively new, and no examples are available at this time.