



USDA-CSREES 2007 National Water Quality Conference

Who'll Stop the Rain? New Strategies for Stormwater Management and Water Resources Protection in North Carolina

According to the North Carolina Department of Environment and Natural Resources (DENR), stormwater management is the Number One issue facing planners and developers across the state. A DENR spokesperson recently said ... "whenever there's a problem, it always comes down to managing stormwater runoff." Fortunately, the solution to North Carolina's stormwater management quandary has arrived. Bulky and costly "pipe-and-pond" technology is quickly going the way of the cotton gin and the spinning wheel. Centralized, structure-intensive systems featuring curbs and gutters, deep sump catch basins, extensive piping, and massive detention basins will soon be historic relicts. Low Impact Development (LID) and small, localized Best Management Practices (BMP's) are becoming North Carolina's option of choice for managing the storm clouds. LID technology features non-structural, mini-BMP's (rain gardens, bioretention swales, permeable pavements, infiltration chambers) to control and treat stormwater runoff where it is generated. Unsightly phalanxes of pipes, culverts and detention basins are replaced with visually-appealing BMP's planted with native vegetation. Regulators favor the LIDBMP designs because they protect water quality and maintain flow volumes while increasing open space and wildlife habitat. Neighbors love the less-intrusive, greener development styles the LID-BMP's provide. Property owners and developers use LIDBMP's to save time and money in the permitting process while increasing the short and long-term marketability of their projects. This 45-minute Power Point program describes the thinking behind LID technology and demonstrates the design and use of various BMP's. The emphasis is on creating subwatersheds to contain and treat stormwater runoff where it originates on a development site. Properly designed, LID-BMP systems eliminate off-site runoff for 99% of all storm events.

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