

Presentation Proposal
2010 Missouri Floodplain & Stormwater Managers Association Conference
April 7-9, 2010 Osage Beach, MO

Title:

Mimicking Pre-Construction Stormwater Runoff: A Requirement for New Development Projects in MSD

Abstract:

The current regulatory and technology trend in post-construction stormwater management is toward low-impact development (LID) techniques that mimic pre-construction runoff conditions. The Missouri Department of Natural Resources (DNR) General Permit for Discharges from Regulated Small Separate Municipal Storm Sewer Systems (or MS4s) now requires controls that mimic pre-construction runoff conditions on new development projects to the maximum extent practicable. This requirement, included in the Metropolitan St. Louis Sewer District (MSD) current (2008-2013) permit, is a change from MSD's previous permit.

Phrases like "mimic pre-construction runoff" and "maximum extent practicable" are used in the MS4 permit to allow the permittee flexibility to form regulations that fit their community and to reflect improvements in the state of practice. These terms are not numerically defined and force municipal officials to "make the call" as to whether a particular development meets the MS4 permit's intent. The core of the issue is an evaluation of the frequency, volume, rate, and quality of stormwater released from a development project. The presentation will discuss how MSD interprets this requirement during development plan review and discuss the types of post-construction Best Management Practices (BMPs) that meet (and do not meet) this requirement. The presentation will also answer questions such as:

- What is a new development project (vs. a redevelopment project) in the MSD?
- What are "volume-based" and "flow-through" BMPs?
- What tools are available for designing BMPs that mimic pre-existing runoff conditions?
- How are these techniques integrated with flood control requirements?

This presentation will be beneficial to site development professionals impacted by these interpretations as well as other municipal officials outside the MSD who are faced with similar questions.

Presenter:

Jay Hoskins, P.E., Civil Engineer, Metropolitan St. Louis Sewer District

Contact:

Jay Hoskins
Civil Engineer
Metropolitan St. Louis Sewer District
2350 Market Street
St. Louis, MO 63025
jshosk@stlmsd.com
314/768-6272