

Stormwater Rules

By Joe Skupien, P.E.

The arrival of spring this year will mean more than the return of warm weather, flowers, and songbirds in New Jersey. It will also mark the deadline for New Jersey's municipalities to adopt new Stormwater Control Ordinances that are intended to control the stormwater impacts of land development and redevelopment projects that disturb at least one acre of land. The NJ Department of Environmental Protection (NJDEP) mandated their adoption two years ago with its adoption of stormwater management regulations.

As municipalities work to finalize and adopt Stormwater Control Ordinances, it is a good time to review an important performance standard that all ordinances must contain -- new nonstructural stormwater management requirements. The NJDEP Stormwater Management Rules state that all Stormwater Control Ordinances must contain requirements for maintaining pre-developed levels of groundwater recharge and stormwater runoff quality and quantity. The Rules mandate that non-structural stormwater management strategies and measures be the first choice for maintaining these pre-developed levels.

Nonstructural strategies seek to reduce or prevent adverse stormwater impacts through sound site planning that preserves or closely mimics a development site's natural or pre-developed runoff response to rainfall. Unlike traditional structural facilities which respond *to* the rainfall-runoff process, nonstructural measures *interact with* the process, controlling stormwater runoff and pollutants closer to the source and providing site features that can significantly reduce the overall stormwater impacts of land development. Nonstructural stormwater management measures include minimizing site disturbance, preserving important site features, reducing and disconnecting impervious cover, flattening slopes, utilizing native vegetation, minimizing turf grass lawns, utilizing vegetated swales instead of gutters and pipes, and maintaining a site's natural drainage features.

Since nonstructural stormwater management typically relies on a variety of measures distributed throughout a land development site, ownership and maintenance of the various measures may be the responsibility of multiple property owners with varying interests, knowledge, abilities, and resources. Therefore, it is vital to have a good public understanding of and support for the various nonstructural measures selected and approved for use in a municipality. Such understanding and support must include an appreciation for the role that the nonstructural measures play in the site's stormwater management program and a strong, enforceable commitment to preserve and maintain them.

As municipalities move toward adoption of new Stormwater Control Ordinances, they must critically evaluate the range of available nonstructural and small structural measures and authorize or approve only those that can be properly operated, maintained, and preserved by their residents, property owners, and municipal employees. Failure to achieve such acceptance, operation, and maintenance can lead to flooding, erosion, and runoff pollution; damage to downstream waterways and property, and threats to public safety.

More information about this important aspect of municipal Stormwater Control Ordinances can be found in Chapter 2 of the New Jersey Stormwater BMP Manual, which can be accessed through a link at www.njstormwater.org.