

3.0 NON-STRUCTURAL AND STRUCTURAL BMP's

3.1 Non-Structural BMP's

Non-Structural BMP terms like "Low Impact Development" and "Conservation Design" refer to an environmentally sensitive approach to site development and stormwater management that minimizes the effect of development on water, land and air. This emphasizes the integration of site design and planning techniques that preserve natural systems and hydrologic functions on a site through the use of Non-Structural BMP's. Non-Structural BMP deployment is not a singular, prescriptive design standard but a combination of practices that can result in a variety of environmental and financial benefits. Reliance on Non-Structural BMP's encourages the treatment, infiltration, evaporation, and transpiration of precipitation close to where it falls while helping to maintain a more natural and functional landscape (Appendix A).

3.2 Structural BMP's

Many so-called Structural BMP's are actually based on natural systems and rely upon vegetation and soil mechanisms in order to perform as intended. Others are considered more conventional "brick and mortar" techniques. The use of these mitigation techniques is not meant to replace the use of non-structural BMP's, but rather to work in tandem with those planning and design-based approaches to minimize unavoidable impacts.

The decision about which structural BMP's are most appropriate comes not as a post construction fix, but rather as a result of the Site Design Procedure for Comprehensive Stormwater Management.

The PA DEP Stormwater BMP Manual contains details on some 21 Structural BMP's, several of which offer variations on a central theme. Like the Non-Structural BMP's presented in the Manual, the list of Structural BMP's is expected to grow as stormwater management practices continue to evolve and mature (Appendix A).