BMP Effectiveness

Structural stormwater BMPs differ in their ability and effectiveness to provide specific management functions. Once LID site planning and design principles have been considered and

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applied, structural stormwater BMPs should be selected and designed based on site characteristics to meet the stormwater management standards and performance criteria described in <u>Chapter 4 - Stormwater Management Standards and Performance Criteria</u>.

Pollutant-specific treatment efficiency and the ability of BMPs to retain runoff on-site are important factors for preserving pre-development hydrologic characteristics and pollutant loads. Stormwater BMPs that can retain the required runoff volume on-site, such as infiltration systems and stormwater reuse BMPs, are suitable for meeting the stormwater retention performance criterion, while other "treatment-only" stormwater BMPs such as filtering BMPs and stormwater ponds/wetlands, can be used to treat runoff in situations where the retention performance criterion cannot be fully achieved. Pretreatment BMPs are restricted in their use as pretreatment for other stormwater BMPs only. Other types of BMPs that provide substantial storage volumes, such as stormwater ponds and wetlands and underground chambers, can be used either alone or in combination with other BMPs to meet the stormwater quantity control standards for larger storms.

- Chapter 5 Low Impact Development Site Planning and Design Strategies, identifies acceptable LID site planning and design strategies and structural stormwater BMPs for meeting specific stormwater management standards and performance criteria.
- Chapter 8 Selection Considerations for Stormwater BMPs provides additional guidance on the selection of structural stormwater BMPs to meet specific stormwater management objectives for a particular site.