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

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.

### Use of Multiple BMPs in Series

Stormwater BMPs can be combined in series to meet water quality and stormwater quantity control objectives. The use of multiple structural stormwater BMPs in series is referred to as a “treatment train” approach. The use of a treatment train approach can:

- Accomplish multiple stormwater management objectives to meet the stormwater management standards and performance criteria

- Increase the level and reliability of system performance

- Increase the lifespan of stormwater BMPs by distributing pollutant removal over multiple practices

- Allow multiple BMPs to target different pollutants to improve overall treatment effectiveness.

A treatment train typically consists of a pretreatment BMP, followed by a retention and/or treatment BMP to meet the runoff volume and pollutant reduction (retention/treatment) standard, and potentially another stormwater BMP to fully meet the stormwater runoff quantity control standard.