

# THE SMP HIERARCHY

The SMP Hierarchy is shown below in Table 3.2-2. All SMPs are classified as one of three preference levels: Highest, Medium, and Lowest.

## Highest-Preference SMPs

The highest-ranking SMPs include bioinfiltration, bioretention, permeable pavers, reinforced turf, and green roofs. Bioinfiltration is ranked highest for its ability to infiltrate stormwater and provide triple bottom line benefits while being cost effective and long-lasting. Similarly, bioretention is ranked very high, reflecting its ability to settle suspended solids and cycle nutrients via plant uptake.

The designer is encouraged to incorporate SMPs from this Hierarchy tier into their stormwater management design. As discussed in Section 2.4, projects that manage stormwater with SMPs only in this category are eligible for a Surface Green Review. Advantages of a Surface Green Review include a shorter (five-day) PCSMP Review Phase and the option to postpone infiltration testing until construction.

## Medium-Preference SMPs

SMPs considered to have medium preference (subsurface infiltration, cisterns, blue roofs, porous asphalt, porous concrete, and ponds and wet basins) tend to efficiently manage stormwater via infiltration, volume reduction, or detention. These SMPs often provide fewer triple bottom line benefits and may not last as long as more highly preferred SMPs.

**TABLE 3.2-2:  
SMP Hierarchy**

| SMP/SMPS IN SERIES                                | SECTION   | PREFERENCE LEVEL |
|---|-----------|------------------|
| Bioinfiltration                                   | 4.1       | <i>Highest</i>   |
| Bioretention                                      | 4.1       |                  |
| Permeable Pavers/Reinforced Turf                  | 4.2       |                  |
| Green Roofs                                       | 4.3       |                  |
| Subsurface Infiltration                           | 4.4       | <i>Medium</i>    |
| Cisterns  | 4.5       |                  |
| Blue Roofs  | 4.6       |                  |
| Porous Asphalt/Porous Concrete                    | 4.2       |                  |
| Ponds and Wet Basins                              | 4.7       |                  |
| Subsurface Detention with Vegetated Media Filters | 4.8/4.9   | <i>Lowest</i>    |
| Subsurface Detention with Roof Runoff Isolation   | 4.8/3.1.7 |                  |
| Subsurface Detention with Media Filters           | 4.8/4.9   |                  |
| Vegetated Media Filters                           | 4.9       |                  |
| Media Filters                                     | 4.9       |                  |

## Lowest-Preference SMPs

The least-preferred SMPs in the Hierarchy (subsurface detention with vegetated media filters, subsurface detention with roof runoff isolation, subsurface detention with media filters, vegetated media filters, and media filters) are non-infiltrating and generally provide little, to no, triple bottom line benefits. Additionally, the SMPs in this tier tend to have relatively high operations and maintenance costs and may malfunction more frequently than other SMPs.