

Design Manual Revisions 01-28-2026

The following revisions to the RVSQDM listed below were approved by the Stormwater Advisory Team at the quarterly meeting on Jan 28th, 2026 for immediate implementation. This revision may be updated as more information is gathered.

1. **Imported Water Quality Soil Mixture Assumed Infiltration Rate**

- a. **Section:** 4.3.1, 4.5.1
- b. **Page:** 4-2

Note: This change applies to any place where an assumed infiltration rate for the imported water quality soil mixture is used.

- c. **Change Description:** If using the imported water quality soil mixture, change assumed infiltration rate of 12 inches per hour to 6 inches per hour.
- d. **Reasoning:** Recent field and controlled testing of imported water-quality soil mixes were reviewed. Field testing at applicable sites showed near-zero infiltration; however, testing locations were limited and soil mix specifications at those sites could not be verified. A control test using a newly remixed soil meeting Design Manual specifications yielded approximately 6 inches per hour of infiltration. Based on these findings, SWAT agreed that the infiltration rate currently assumed in the Design Manual is too high.

e. **Original Text:**

4.3.1 General BMP Design Standards: Retention

3c. The Maximum Design Infiltration Rate for Retention Facilities shall be 12 inches per hour.

4.5.1 Performance Design Approach and Specific Design Standards

3. Soil Filtration BMP sizing calculations must be performed using hydrograph routing methodology. The facility size is determined by routing the Treatment inflow of the facility versus the infiltration rate (outflow) of the imported soil.

- o The hydraulic loading of the facility is determined per the Hydrologic Design Criteria in this chapter.*
- o Soil Filtration BMP shall be sized with a maximum Design Infiltration rate of 6 inches per hour. If using the imported water quality soil mixture, it can be assumed to have an infiltration rate of 12 inches per hour.*

f. **Revised Text:**

4.3.1

3c. The Maximum Design Infiltration Rate for Retention Facilities shall be 6 inches per hour. Design Infiltration Rates between 6 and 12 inches per hour may be considered for approval by the MS4 jurisdiction on a case-by-case basis; consult the approving jurisdiction for applicable submittal and evaluation requirements.

4.5.1 Performance Design Approach and Specific Design Standards

- o Soil Filtration BMP shall be sized with a maximum Design Infiltration rate of 6 inches per hour. If using the imported water quality soil mixture, it can be assumed to have an infiltration rate of 6 inches per hour.*