

Acceptable BMP's in Pennsylvania for Post Construction Stormwater Management

The following charts list various stormwater BMPs that are acceptable for use in Pennsylvania along with their location in the manuals cited by the Department's Comprehensive Stormwater Management Policy. Those manuals provide guidance for the use of the BMPs along with general designs. Site specific applications and designs are dependent on local soils, rainfall, land cover, slope, and other relevant information. These BMPs can be used individually and collectively to replicate the pre-construction runoff and infiltration that occurred on the site prior to development. The effective use of these BMPs in achieving the objectives of the policy ensures compliance with the policy and the protection of ground and surface water resources. The three main requirements of the policy are to maintain groundwater recharge, maintain surface water quality and to control the rate and volume of surface flow. The following charts list BMP's that will help satisfy each of these requirements.

GROUNDWATER RECHARGE						
BMP	Delaware SW Guidance Manual (1)	Maryland SW Handbook (2)	New Jersey BMP Manual (3)	New York SW Manual (4)	Pennsylvania BMP Handbook (5)	Center for Watershed Protection (6)
Permeable Paving			Ch. 4, Table 2-5; Ch. 5, p. 111		Section 8	Fact Sheets SW Management Porous Pavement
Stormwater Infiltration		Section 3.3	Ch. 4, Table 2-5; Ch. 5, p. 98	Section 6.3	Section 8	Manual Builder Performance Criteria Infiltration Systems
Grass Swale	P. 3-57	Section 3.5	Ch. 5, p. 84	Section 6.5	Section 8	Manual Builder Performance Criteria Open Channels
Bioretention	Appendix A	Section 3.4	Ch. 4, Table 2-5; Ch. 5, p. 55	Section 6.4	Section 8	Manual Builder Performance Criteria Filtering Systems
Filter Strip	P. 3-39		Ch. 4, Table 2-5		Section 8	Fact Sheets SW Management Grassed Filter Strips

WATER QUALITY

BMP	Delaware SW Guidance Manual (1)	Maryland SW Manual (2)	New Jersey BMP Manual (3)	New York SW Manual (4)	Pennsylvania BMP Handbook (5)	Center for Watershed Protection (6)
Permeable Paving			Ch. 4, Table 2-5; Ch. 5, p. 111		Section 8	Fact Sheets SW Management Porous Pavement
Stormwater Infiltration		Section 3.3	Ch. 4, Table 2-5; Ch. 5, p. 98	Section 6.3	Section 8	Manual Builder Performance Criteria Infiltration Systems
Grass Swale	P. 3-57	Section 3.5	Ch. 5, p. 84	Section 6.5	Section 8	Manual Builder Performance Criteria Open Channels
Bioretention	Appendix A	Section 3.4	Ch. 4, Table 2-5; Ch. 5, p. 55	Section 6.4	Section 8	Manual Builder Performance Criteria Filtering Systems
Filter Strip	P. 3-39		Ch. 4, Table 2-5		Section 8	Fact Sheets SW Management Grassed Filter Strips
Stormwater Wetlands		Section 3.2	Ch. 4, Table 2-5; Ch. 5	Section 6.2	Section 8	Manual Builder Performance Criteria Wetlands
Water Quality Structures					Section 8	
Sand Filter		Section 3.4	Ch. 4, Table 2-5; Ch. 5, p. 137	Section 6.4	Section 8	Manual Builder Performance Criteria Filtering Systems
Wet Pond (extended detention pond)		Section 3.1	Ch. 4, Table 2-5; Ch. 5, p. 150	Section 6.1	Section 8	Manual Builder Performance Criteria Ponds
Riparian Corridor Management	Appendix B		Ch. 4, Table 2-5		Section 8	
Rooftop Runoff Management			Ch. 5, p. 127		Section 8	

RATE AND VOLUME CONTROL

BMP	Delaware SW Guidance Manual (1)	Maryland SW Manual (2)	New Jersey BMP Manual (3)	New York SW Manual (4)	Pennsylvania BMP Handbook (5)	Center for Watershed Protection (6)
Permeable Paving			Ch. 4, Table 2-5; Ch. 5, p. 111		Section 8	Fact Sheets SW Management Porous Pavement
Stormwater Infiltration		Section 3.3	Ch. 4, Table 2-5; Ch. 5, p. 98	Section 6.3	Section 8	Manual Builder Performance Criteria Infiltration Systems
Grass Swale	P. 3-57	Section 3.5	Ch. 5, p. 84	Section 6.5	Section 8	Manual Builder Performance Criteria Open Channels
Bioretention	Appendix A	Section 3.4	Ch. 4, Table 2-5; Ch. 5, p. 55	Section 6.4	Section 8	Manual Builder Performance Criteria Filtering Systems
Dry Pond					Section 8	Manual Builder Performance Criteria Ponds
Stormwater Wetlands		Section 3.2	Ch. 4, Table 2-5; Ch. 5	Section 6.2	Section 8	Manual Builder Performance Criteria Wetlands
Wet Pond (extended detention pond)		Section 3.1	Ch. 4, Table 2-5; Ch. 5, p. 150	Section 6.1	Section 8	Manual Builder Performance Criteria Ponds
Riparian Corridor Management	Appendix B		Ch. 4, Table 2-5		Section 8	
Rooftop Runoff Management			Ch. 5, p. 127		Section 8	

- (1) www.dnrec.state.de.us/dnrec2000/Divisions/Soil/Stormwater/Apps/DesignManualRequest.htm
- (2) www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/stormwater_design/index.asp
- (3) www.state.nj.us/dep/watershedmgt/bmpmanual.htm
- (4) www.dec.state.ny.us/website/dow/swmanual/swmanual.htm
- (5) www.pacd.org/products/bmp/bmp_hardbook.htm
- (6) www.stormwatermanual.org