

APPENDIX J

BMP Planning and Design Spreadsheets

Table 1: Planning & Design Matrix 1 - Land Use

Treatment Control Group	Treatment Control Design	Rural	Residential	Roads and Highways	Commercial/ High Density	Hotspots/ Industrial	Ultra Urban
Vegetative Treatment Systems	Vegetated Swales	A (L-U)	A (L-U)	S (L-U)	S (L-U)	S (L-U)	S (L-U)
	Vegetated Filter Strips	A	A	S	S	S	S
Infiltration Systems	Infiltration Basins, Infiltration Trenches & Dry Wells	S (i)	S (i)	S (i)	S (i)	X	X
Biofiltration Systems	Landscape Detention, Tree Box Filters, Rain Gardens & Storm Water Planters	A (L-U)	A (L-U)	A (L-U)	A (L-U)	S (L-U)	S (L-U)
	Pervious Pavements	A (L-U)	A (L-U)	A (L-U)	A (L-U)	S (L-U)	S (L-U)
	Cisterns that drain to landscape features	S	S	X	X	X	X
	Green roofs	S	A	X	A	S	S

Explanation:

A = Applies under most conditions

S = Applies under some conditions

X = Generally not applicable

(L-U) = BMP may require an impermeable liner and an underdrain system

(i) = Feasibility of BMP depends on existing onsite soil infiltration rates

Table 2: Planning & Design Matrix 2 - Stormwater Management Capability

Treatment Control Group	Treatment Control Design	Water Quality Improvement	Groundwater Recharge	Reduce Runoff Velocity	Reduce Runoff Volume
Vegetative Treatment Systems	Vegetated Swales	A	S	A	S
	Vegetated Filter Strips	A	S	A	S
Infiltration Systems	Infiltration Basins, Infiltration Trenches & Dry Wells	A	A	A	A
Biofiltration Systems	Landscape Detention, Tree Box Filters, Rain Gardens & Storm Water Planters	A	S	A	S
	Pervious Pavements	A	S	A	A
	Cisterns that drain to landscape features	S	A	A	A
	Green roofs	S	S	S	S

Explanation:

A = Practice generally meets storm water management goals

S = Practice can provide some benefit depending on site constraints

X = Practice can rarely be used to meet this goal

Table 3: Planning & Design Matrix 3 - Community and Environmental Factors

Treatment Control Group	Treatment Control Design	Ease of Maintenance	Community Acceptance	Safety	Habitat
Vegetative Treatment Systems	Vegetated Swales	M	M - H	M - H	M
	Vegetated Filter Strips				
Infiltration Systems	Infiltration Basins, Infiltration Trenches & Dry Wells	M	M - H	M - H	L
Biofiltration Systems	Landscape Detention, Tree Box Filters, Rain Gardens & Storm Water Planters	M	H	M - H	M
	Pervious Pavements	M	M	M	L
	Cisterns that drain to landscape features	L	M	M	L
	Green roofs	M	M	M	M

Explanation:

H = High benefit and/or low limitations

M = Medium benefit and/or limitations

L = Low benefit and/or high limitations

Table 4: Planning & Design Matrix 4 - General Pollutant Removal Effectiveness

Treatment Control Group	Treatment Control Design	Sediment	Nutrients	Trash	Metals	Bacteria	Oil and Grease	Organics
Vegetative Treatment Systems	Vegetated Swales	M	L	M	M	L	M	M
	Vegetated Filter Strips	H	L	M	H	L	H	M
Infiltration Systems	Landscape Detention, Tree Box Filters, Rain Gardens & Storm Water Planters	H	H	H	H	H	H	H
Biofiltration Systems	Landscape Detention, Tree Box Filters & Storm Water Planters	H	M	H	H	H	H	H
	Pervious Pavements	H	M	L	M	M	M-H	M-H
	Cisterns that drain to landscape features	M	L	M	M	L	M	M
	Green roofs	M	L	M	M	L	M	M

Explanation:

H = High pollutant removal effectiveness

M = Medium pollutant removal effectiveness

L = Low pollutant removal effectiveness