

BMP Effectiveness Comparison

Prepared by: Bob Kelly, SAIC

BMP Effectiveness Values

	Lake Jesup TMDL				EPA BMP Tool (modified by E. Livingston)			
BMP Type	Soil Type	BMP TN	BMP TP	BMP Wat	Soil Type	BMP TN	BMP TP	BMP Wat
No Stormwater Facility	-	-	-	-	-	-	-	-
Combination (Swale/Dry Pond)	-	0.30	0.25	-				
Combination (Swale/Wet Pond)	-	0.86	0.63	-				
Dry Detention	-	0.20	0.20	-				
Wet Pond					B, C, D	0.25	0.65	-
Wet Pond					C, D	0.10	0.30	-
Wet Detention Pond	-	0.80	0.60	-				
Retention (0.25")					A, B	0.40	0.40	-
Dry Retention (0.50")					A, B	0.60	0.60	-
Retention (0.75")					A, B	0.80	0.80	-
Retention (1.00")					A, B	0.90	0.90	-
With filtration								
Filtration								
Media								
Sand								
Channel with wetland bottom								
Orlando 100% On-Site Retention	-	1.00	1.00	-				
Porous Pavement								
Hydrodynamic Devices								
Swales	-	0.10	0.05	-	A, B&C	0.60	0.60	-
Orlando Private BMPs	-	0.20	0.20	-				
Lake Drainage Wells	-	0.64	0.64	0.64				

General comments:

Dry detention relatively lower in TMDL, particularly for phosphorus

Wet detention (really wet retention) assumes at least 0.75" in TMDL; TP reduction higher in EPA

Swales much higher in EPA

Orlando 100% On-Site Retention is retention better than 1"