## #9 – Maintenance Standards for Wet Biofiltration Swales (BMP BF.02) and Continuous Inflow Biofiltration Swales (BMP BF.03):

$\sqrt{}$	Drainage System Feature	Defect or Problem	Condition When Maintenance is Needed	Results Expected When Maintenance is Performed
	General	Sediment Accumulation on Grass	Sediment depth exceeds 2 inches or inhibits vegetation growth in 10 percent or more of swale.	No sediment deposits in treatment area of the biofiltration swale. Remove sediment deposits on grass treatment area of the swale. When finished, swale should be level from side to side and drain freely toward outlet.  There should be no areas of standing water once inflow has ceased.
	General	Standing Water	When water stands in the swale between storms and does not drain freely.	Swale drains freely and no standing water in swale between storms.  Any of the following may apply: remove sediment or trash blockages, improve grade from head to foot of swale, remove clogged check dams, add underdrains or convert to a wet biofiltration swale.
	General	Flow Spreader	Flow spreader uneven or clogged so that flows are not uniformly distributed through entire swale width.	Spreader leveled and cleaned and flow spread evenly over entire swale width.
	General	Constant Base Flow	When small quantities of water continually flow through the swale, even when it has been dry for weeks, and an eroded, muddy channel has formed in the swale bottom.	Base flow removed from swale by a low-flow pea-gravel drain the length of the swale, or by-passed around the swale.
	General	Poor Vegetation Coverage	When grass is sparse or bare or eroded patches occur in more than 10 percent of the swale bottom.	Swale has no bare spots and grass is thick and healthy.  If grass growth is poor, determine and address the cause. Re-plant with plugs of grass from the upper slope: plant in the swale bottom at 8-inch intervals. Or re-seed into loosened, fertile soil.
	General	Vegetation	When the grass becomes excessively tall (greater than 10 inches); when nuisance weeds and other vegetation starts to take over.	Vegetation mowed or nuisance vegetation removed so that flow not impeded.  Grass mowed to a height of 3 to 4 inches. No grass clippings left in swale.
	General	Excessive Shading	Grass growth is poor because sunlight does not reach swale.	Over-hanging limbs trimmed back and brushy vegetation on adjacent slopes removed.
	General	Inlet/Outlet	Inlet/outlet areas impacted by sediment, vegetation, and/or debris.	Inlet and outlet areas clear of sediment, vegetation, and debris.

## #9 – Maintenance Standards for Wet Biofiltration Swales (BMP BF.02) and Continuous Inflow Biofiltration Swales (BMP BF.03):

$\sqrt{}$	Drainage System Feature	Defect or Problem	Condition When Maintenance is Needed	Results Expected When Maintenance is Performed
	General	Trash and Debris Accumulation	Trash and debris accumulated in the bioswale.	Leaves, litter, and oily materials removed as needed. Curb cuts and level spreaders cleaned as needed.
	General	Erosion/Scouring	Eroded or scoured swale bottom due to flow channelization, or higher flows.	No eroded or scoured areas in biofiltration swale. Cause of erosion or scour addressed. For ruts or bare areas less than 12 inches wide, repair the damaged area by filling with crushed gravel. If bare areas are large, generally greater than 12 inches wide, the swale should be re-graded and reseeded. For smaller bare areas, overseed when bare spots are evident, or take plugs of grass from the upper slope and plant in the swale bottom at 8-inch intervals.