

Inspection and Maintenance Requirements for Wet Biofiltration

Swale



Maintenance Checklist

Maintenance Component	Defect	Conditions When Maintenance is Needed	Results Expected When Maintenance Is Performed	Satisfactory	Unsatisfactory	Comments
General	Sediment accumulation	<ul style="list-style-type: none"> Sediment depth exceeds 2 inches in 10% of the swale treatment area. 	<ul style="list-style-type: none"> Remove sediment deposits from bioswale. 			
	Water depth	<ul style="list-style-type: none"> Water not retained to a depth of about 4 inches during the wet season. 	<ul style="list-style-type: none"> Build up or repair outlet berm so that water is retained to an appropriate depth. 			
	Sparse or excessive vegetation	<ul style="list-style-type: none"> Vegetation becomes sparse and does not provide adequate filtration, or Vegetation is crowded out by very dense clumps of cattail. 	<ul style="list-style-type: none"> Determine cause of lack of vigor of vegetation. Replant as needed. For excessive cattail growth, cut cattail shoots back and compost off-site. 			
	Clogged inlet/outlet	<ul style="list-style-type: none"> Inlet/outlet areas clogged with sediment and/or debris. 	<ul style="list-style-type: none"> Remove clogging or blockage in the inlet and outlet areas. 			
	Trash and debris	<ul style="list-style-type: none"> Any trash and debris which exceed 1 cubic foot per 1,000 square feet. In general, there should be no visual evidence of dumping. If less than threshold, remove trash and debris as part of next scheduled maintenance. 	<ul style="list-style-type: none"> Remove trash and debris from bioswale. 			
	Erosion/scouring	<ul style="list-style-type: none"> Swale has eroded or scoured due to flow channelization or high flows. 	<ul style="list-style-type: none"> Check design flows to ensure bioswale is large enough to handle flows. Bypass excess flows or enlarge bioswale. Replant eroded areas with fibrous-rooted plants such as soft rush (<i>Juncus effusus</i>) in wet areas or snowberry (<i>Symphoricarpos albus</i>) in dry areas. 			