

Vegetated Swale Checklist

Annual inspections are required. This checklist describes inspection activities, and notes additional recommended inspections. Contact the design engineer, Clean Water Services or City representative for more information.

✓ NONE	Recommended, in addition to required annual inspection	System Feature	Problem	Conditions to Check for	Preferred Conditions and Maintenance Practices
	<p><i>Monthly and after any major storm (1-inch in 24 hours)</i></p> <p>Annually Required</p>	General	Obstructed Inlet/ Outlet	Inlet/outlet areas clogged with sediment, vegetation or debris	Unobstructed inlet/outlet; material and blockages removed
	<p><i>Monthly from November through April</i></p> <p>Annually Required</p>	General	Flow not distributed evenly	Flows unevenly distributed through swale due to uneven or clogged flow spreader	Level the spreader and clean so that flows spread evenly over entire swale width
	Annually Required	General	Structure Damage to Frame or Top Slab	Frame not sitting flush on top slab (more than 3/4 inch between frame and top slab); frame not securely attached	Frame is firmly attached and sits flush on the riser rings or top slab
	Annually Required	General	Fractures or Cracks in Basin Walls or Bottom	Maintenance person determines the structure is unsound	Basin replaced or repaired to design standards
	Annually Required	General	Fractures or Cracks in Basin Walls or Bottom	Grout fillet is separated or cracked wider than 1/2 inch and longer than 1 foot at the joint of any inlet/outlet pipe, or evidence of soil entering through cracks	Pipe is regouted and secure at basin wall
	Annually Required	General	Settlement / Misalignment	Failure of basin has created a safety, function, or design problem	Basin replaced or repaired to design standards
	<p><i>Monthly from November through April</i></p> <p>Annually Required</p>	General	Constant Baseflow	Small, continual flow of water through the swale even after weeks without rain; swale bottom has an eroded, muddy channel	Add a low-flow pea gravel drain the length of the swale or bypass the baseflow around the swale
	<p><i>Monthly from November through April</i></p> <p>Annually Required</p>	General	Sediment Accumulation in Treatment Area	Sediment depth exceeds 3 inches	Remove sediment deposits on grass treatment area of the bio-swale; swale is level from side to side and drains freely toward outlet; no standing water once inflow has ceased

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✓ COMPLIANCE	Recommended, in addition to required annual inspection	System Feature	Problem	Conditions to Check for	Preferred Conditions and Maintenance Practices
	Monthly and after any major storm (1-inch in 24 hours) Annually Required	General	Obstructed Inlet/Outlet	Inlet/outlet areas clogged with sediment, vegetation or debris	Unobstructed inlet/outlet; material and blockages removed
	Monthly from November through April Annually Required	General	Flow not distributed evenly	Flows unevenly distributed through swale due to uneven or clogged flow spreader	Level the spreader and clean so that flows spread evenly over entire swale width
	Annually Required	General	Structure Damage to Frame or Top Slab	Frame not sitting flush on top slab (more than 3/4 inch between frame and top slab); frame not securely attached	Frame is firmly attached and sits flush on the riser rings or top slab
	Annually Required	General	Fractures or Cracks in Basin Walls or Bottom	Maintenance person determines the structure is unsound	Basin replaced or repaired to design standards
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	Annually Required	General	Settlement / Misalignment	Failure of basin has created a safety, function, or design problem	Basin replaced or repaired to design standards
	Monthly from November through April Annually Required	General	Constant Baseflow	Small, continual flow of water through the swale even after weeks without rain; swale bottom has an eroded, muddy channel	Add a low-flow pea gravel drain the length of the swale or bypass the baseflow around the swale
	Monthly from November through April Annually Required	General	Sediment Accumulation in Treatment Area	Sediment depth exceeds 3 inches	Remove sediment deposits on grass treatment area of the bio-swale; swale is level from side to side and drains freely toward outlet; no standing water once inflow has ceased

Vegetated Swale Checklist (continued)

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	Recommended, in addition to required annual inspection	System Feature	Problem	Conditions to Check for	Preferred Conditions and Maintenance Practices
	<i>Monthly and after any major storm (1-inch in 24 hours)</i> Annually Required	General	Trash and Debris	Visual evidence of trash, debris or dumping	Trash and debris removed from facility
	<i>Monthly from November through April</i> Annually Required	General	Standing Water	Standing water in the swale between storms that does not drain freely	Remove sediment or trash blockages; improve grade from end to end of swale; no standing water 24 hours after any major storm (1-inch in 24 hours)
	<i>Monthly from November through April</i> Annually Required	General	Rodents	Evidence of rodents or water piping through facility via rodent holes	No rodents; facility repaired. Refer to Clean Water Services integrated pest management guidance documents.
	Annually Required	General	Insects	Insects such as wasps and hornets interfere with maintenance activities	Harmful insects removed
	<i>Monthly from November through April</i> Annually Required	General	Contamination and Pollution	Any evidence of oil, gasoline, contaminants, or other pollutants	No contaminants or pollutants present; coordinate removal/cleanup with local water quality response agency
	<i>Monthly from November through April and after any major storm (1-inch in 24 hours)</i> Annually Required	Grates	Trash and Debris	Visual evidence of trash, debris or dumping	Trash and debris removed from grate
	Annually Required	Grates	Damaged or Missing	Grate missing or broken grate members	Grate is in place and meets design standards
	Annually Required	Outlet Structure	Grate Not in Place	Grate is missing or only partially in place	Any open structure needs maintenance; replace grate if missing
	<i>Monthly during growing season</i> Annually Required	General	Vegetation	Specified or approved grass grows so tall that it competes with shrubs or becomes a fire danger. (Note: except emergent wetland grasses in the treatment area of low maintenance facilities)	String trim grass to 4" to 6" and remove clippings; take care not to girdle the bark of trees and shrubs