

## LIDA 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.

✓ COMPLIANCE	Recommended, in addition to required annual inspection	System Feature	Problem	Conditions to Check for	Preferred Conditions and Maintenance Practices
	<p><i>Monthly from November through April and after any major storm (1-inch in 24 hours)</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 after inflow has ceased
	<p><i>Monthly from November through April and after any major storm 1-inch in 24 hours)</i></p> <p>Annually Required</p>	General	Standing Water	Standing water in the planter between storms that does not drain freely	Remove sediment or trash blockages; improve grade from end to end of planter; no standing water 24 hours after any major storm (1 inch in 24 hours)
	<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
	<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</i></p> <p>Annually Required</p>	General	Poor Vegetation Coverage	Grass or other vegetation is sparse, bare or eroded in more than 10% of the swale bottom	Determine cause of poor growth and correct the condition; re-plant with plugs or containerized plants as needed to meet current density standards during next appropriate planting season
	<p><i>Monthly</i></p> <p>Annually Required</p>	General	Invasive Vegetation as outlined in Ch.4 D&C standards	No invasive vegetation is planted or permitted to remain, including but not limited to the following: Himalayan Blackberry; Reed Canary Grass; Teasel; English Ivy; Nightshade; Clematis; Cattail Thistle; Scotch Broom	No invasive vegetation; remove excessive weeds. Attempt to control even if complete eradication is not feasible. Refer to Clean Water Services integrated pest management guidance documents

# LIDA Swale Checklist (continued)

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	<b>Recommended, in addition to required annual inspection</b>	<b>System Feature</b>	<b>Problem</b>	<b>Conditions to Check for</b>	<b>Preferred Conditions and Maintenance Practices</b>
	<i>Monthly from November through April</i> Annually Required	General	Excessive Shading	Vegetation growth is poor because sunlight does not reach swale	Trim over-hanging limbs, if possible; remove brushy vegetation as needed
	<i>Monthly and after any major storm (1-inch in 24 hours)</i> Annually Required	General	Obstructed Inlet/Outlet	Inlet/outlet areas clogged with sediment, vegetation or debris	Remove material to clear inlet and outlet area
	<i>Monthly from November through April</i> Annually Required	General	Erosion Scouring	Eroded or scoured planter bottom due to flow channelization, or higher flows	Repair ruts or bare areas by filling with topsoil during dry season; regrade and replant large bare areas
	<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	Vegetation	Vegetation blocking more than 10% of the inlet pipe opening	No vegetation blocking inlet pipe opening
	<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</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</i> Annually Required	General	Vegetation	Specified or approved grass grows so tall that it competes with shrubs or becomes a fire danger.	String trim grass to 4" to 6" and remove clippings; take care not to girdle the bark of trees and shrubs. (Note: except emergent wetland grasses in the treatment area of low maintenance facilities)