

9-C.14.0. CONSTRUCTED WETLANDS: O&M CHECKLIST

Inspection Date _____
Project _____ Site Plan/Permit Number _____
Location _____ Date BMP Placed in Service _____
Date of Last Inspection _____ Inspector _____
Owner/Owner's Representative _____
As-Built Plans available: Y / N

Facility Type: Level 1 _____ Level 2 _____

Hydraulic Configuration:

- On-line facility
- Off-line facility

Type of Pre-Treatment Facility:

- Sediment forebay (above ground)
- Vegetated buffer area
- Grass filter strip
- Grass channel
- Other: _____

Type of wetland

- Emergent
- Forested

During the first 6 months following construction, the wetland should be inspected twice after storm events that exceed 1/2 inch of rainfall. Bare or eroding areas in the CDA or around the wetland buffer should be stabilized immediately with grass cover. Trees planted in the buffer and on wetland islands and peninsulas need to be watered every 3 days for the first month, and then weekly during the remainder of the first growing season (April-October), depending on rainfall. Due to typical vegetation survival problems, it is typical to plan and budget for a round of reinforcement planting after one or two growing seasons. Constructed wetlands should be inspected and cleaned up annually. A wetland professional should inspect the facility every 5 years, especially to determine if there is any significant negative change in the wetland species composition from the design or an otherwise healthy wetland.

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Contributing Drainage Area	Adequate vegetation				Supplement as needed	Owner	
	There is excessive trash and debris				Remove immediately.	Owner or professional	
	There is evidence of erosion and/or bare or exposed soil				Stabilize immediately.	Owner or professional	
	There are excessive landscape waste and yard clippings				Remove immediately and recycle or compost	Owner or professional	
Pre-Treatment	There is adequate access to the pre-treatment facility				Establish adequate access	Professional and, perhaps, the locality	
	There is excessive trash and debris				Remove immediately.	Owner or professional	
	There is evidence of erosion and/or exposed soil.				Immediately identify and correct the cause of the erosion and stabilize the eroded or bare area.	Owner or professional	
	Sediment deposits are 50% or more of forebay capacity.				Dredge the sediment to restore the design capacity; sediment should be dredged from forebays at least every 5 years.	Professional	
Pre-Treatment (continued)	The sediment marker is not vertical.				Adjust the sediment depth marker to a vertical alignment	Professional	
	There is dead vegetation				Revegetate, as needed	Owner or professional	
Inlets	The inlet provides a stable conveyance.				Stabilize immediately, as needed; clear blockages.	Owner or professional	
	There is excessive trash, debris, or sediment.				Remove immediately	Owner or professional	
	There is evidence of erosion/undercutting at or around the inlet				Repair erosion damage and reseed	Owner or professional	
	There is cracking, bulging, erosion or sloughing of the forebay dam.				Repair and restabilize immediately.	Professional	
	There is woody growth on the forebay dam.				Remove within 2 weeks of discovery.	Professional	
	There is evidence of nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed frm area	Professional	
Vegetation (trees, shrubs,	Plant composition is consistent with the				Determine if existing plant materials are at least	Professional	

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aquatic plants)	approved plans				consistent with the general Constructed Wetland design criteria, and replace inconsistent species.		
	Invasive species are present.				Remove invasive species immediately and replace vegetation as needed. As a general rule, control of undesirable invasive species (e.g., cattail and Phragmites) should commence when their coverage exceeds more than 15% of a wetland cell area. Although the application of herbicides is not recommended, some types, such as Glyphosate, have been used to control cattails with some success. Extended periods of dewatering may also work, since early manual removal provides only short-term relief from invasive species.	Professional	
	Vegetation is dead or reinforcement planting is needed.				Remove and replace dead or dying vegetation.	Professional	
	Trees planted in the buffer and on wetland islands and peninsulas need watering during the first growing season				Consider watering every 3 days for first month, and then weekly during first year (April – October), depending on rainfall.	Owner or professional	
Vegetation (trees, shrubs, aquatic plants) (continued)	Practice has become overgrown and is not developing into a mature wetland.				Harvest vegetation periodically if the wetland becomes overgrown or to guide maturing of forested wetlands (typically 5 and 10 years after constr.).	Owner or professional	
Wetland Cells and Pools	Sediment accumulation is 50% or more of capacity.				Dredge the sediment to restore the design capacity	Professional	
	There is evidence of floating debris, sparse vegetative cover, erosion or slumping of side slopes.				Remove debris. Repair and stabilize.	Owner or professional	
	Open water is becoming overgrown.				Harvest the unwanted vegetation.	Professional	
	There is evidence of nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from the area.		
Riser/Principle Spillway and Low-Flow Orifice(s)	There is adequate access to riser for maintenance.				Establish adequate access	Professional and, perhaps, the locality	
	Pieces of the riser are deteriorating,				Repair immediately.	Professional	

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	misaligned, broken or missing.						
	Adjustable control valves are accessible and operational.				Repair, as needed.	Professional	
	Reverse-slope pipes and flashboard risers are in good condition.				Repair, as needed.	Professional	
	There is excessive trash, debris, or other obstructions in the trash rack.				Remove immediately.	Owner or professional	
	Seepage into conduit				Seal the conduit	Professional	
Berm/Dam/ Embankment and Abutments	There is sparse veg. cover, settlement, cracking, bulging, misalignment, erosion rills deeper than 2 inches, or sloughing of the dam.				Repair and restabilize immediately.	Professional	
	There are soft spots, boggy areas, seepage or sinkholes present.				Reinforce, fill and stabilize immediately.	Professional	
	There is evidence of nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from area.	Professional	
	There is woody vegetation on the embankment.				Removal of woody species near or on the embankment and maintenance access areas should be done when discovered, but at least every 2 years.		
Emergency Spillway	There is woody growth on the spillway.				Removal of woody species near or on the emergency spillway should be done when discovered, but at least every 2 years.	Owner or professional	
	There is excessive trash, debris, or other obstructions.				Remove immediately.	Owner or professional	
	There is evidence of erosion/back-cutting				Repair erosion damage and reseed	Owner or professional	
	There are soft spots, seepage or sinkholes.				Reinforce, fill and stabilize immediately.	Owner or professional	
Outlet	The outlet provides stable conveyance from the wetland.				Stabilize as needed.	Professional	
	There are excessive sediment deposits.				Remove sediment.	Professional	
	Released water is causing undercutting, erosion or displaced rip-rap at or around the outlet				Repair, reinforce or replace rip rap as needed, and restabilize.	Professional	
	Woody growth within 5 feet of the outlet pipe barrel.				Prune vegetation back to leave a clear discharge area.	Owner or Professional	
	There is excessive				Remove immediately.	Owner or	

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	trash, debris, or other obstructions.					professional	
Overall	Access to the facility or its components is adequate.				Establish adequate access. Remove woody vegetation and debris that may block access. Ensure that hardware can be opened and operated.	Professional and, perhaps, the locality	
	Water levels in one or more cells are abnormally high or low.				Clear blockages of the riser or orifice(s) and make other adjustments needed to meet the approved design specifications.	Professional	
	Complaints from local residents				Correct real problems.	Owner or professional	
	Mosquito proliferation				Eliminate stagnant pools if feasible, and treat for mosquitoes as needed. If sprays are considered, then a mosquito larvicide, such as Bacillus thurendensis or Altoside formulations can be applied <i>only if absolutely necessary</i> . Can also stock the basin with mosquito fish to provide natural mosquito & midge control.	Owner or professional	
	Encroachment on the wetland or easement by buildings or other structures				Inform involved property owners of BMPs status ; clearly mark the boundaries of the receiving pervious area, as needed	Owner or professional (and perhaps the locality)	
Overall (continued)	Safety signage is not adequate.				Provide sufficient, legible safety signage.	Owner or professional	