

# EXAMPLE ONLY

## WET DETENTION BASIN MAINTENANCE AND RESPONSIBILITY AGREEMENT

The Permanent *Stormwater System Maintenance and Responsibility Agreement* requires adequate maintenance for stormwater management/Best Management Practices (BMP) facilities including Wet Detention Basins. Document Wet Detention Basin deficiencies during **annual** inspections. Complete any necessary repairs and/or preventive maintenance procedures in a timely manner to ensure proper functioning as a Wet Detention Basin.

The wet detention basin system is defined as the dry detention basin, outlet structure, and pretreatment if provided.

Important maintenance procedures:

- Immediately after the wet detention basin is established, water the plants on the vegetated shelf and perimeter of the basin twice weekly if needed, until the plants become established (typically six weeks).
- Only fertilize the wet detention pond according to the results of a soil analysis after the initial fertilization required to establish vegetation.
- Ensure a stable groundcover is maintained in the drainage area to reduce the sediment load.
- Minimize the flushing of sediment through the emergency drain to the maximum extent practical when draining the wet detention basin for maintenance or emergency activities.

After the wet detention basin is established, perform inspections once a quarter and after every storm event greater than 1.0 inch for the first year, and annually thereafter. Keep operation and maintenance records in a known location and make them available upon request.

Ensure the measuring device used to determine the deposited sediment elevation/depth gives an accurate depth reading and does not penetrate into accumulated sediments.

When the depth reads \_\_\_\_\_ feet in the main pond, remove the deposited sediment.

When the depth reads \_\_\_\_\_ feet in the forebay, remove the deposited sediment.

Perform recommended maintenance activities as follows:

Required Maintenance	Frequency
Clean and remove debris from inlet and outlet structures.	After large storm events
Mow side slopes	As needed
Removal of invasive vegetation	Semi-annual
Inspect for damage to outlet control structure	Annual
Inspect for sediment accumulation in the basin and forebay	Annual
Inspect for operational inlet and outlet structures	Annual
Repair embankment, side slopes, undercut or eroded areas	Annual, or as needed
Perform wetland plant management and harvesting	Annual
Pesticide/ Nutrient management	Annual, or as Needed
Remove sediment from the forebay	Per design cycle (typical 5-10 year maintenance), after 50% of total forebay capacity is filled
Remove sediment accumulations the main permanent pool	Per design cycle, (typical 5-10 year maintenance) after 25% of permanent pool volume is filled



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Perform trouble shooting activities as follows:

BMP Component	Problem	Solution
Entire wet detention basin	Trash/debris is present.	Remove the trash/debris.
Perimeter	Areas of bare soil and/or erosion	Re-grade the area as necessary, plant vegetation, and water until established.
Inlet device: pipe or swale	Pipe is clogged.	Unclog the pipe. Dispose of sediment properly.
	Pipe is cracked or damaged.	Replace the pipe.
	Erosion is occurring	Re-grade as necessary to smooth and provide additional erosion protection as needed such as erosion control blankets and turf reinforcement matting to prevent future erosion problems.
Forebay	Sediment has accumulated and reduced the depth to 50% of the original design depth.	Search for the source of the sediment and remedy the problem if possible. Remove the sediment and dispose of it in a proper location.
	Erosion has occurred or riprap is displaced.	Provide additional erosion protection such as turf reinforcement matting or riprap if needed to prevent future erosion problems.
	Weeds are present.	Remove the weeds, preferably by hand. If pesticides are used, wipe them on the plants rather than spraying.
Main treatment area	Sediment has accumulated to a depth greater than the original design sediment storage depth.	Search for source of sediment and remedy the problem if possible. Remove sediment and dispose of properly. Re-vegetate disturbed areas immediately with sod (preferred) or seed protected with erosion blankets.
	Pruning is needed to maintain optimal plant health.	Prune according to best professional practices
	Plants are dead, diseased or dying.	Determine the source of the problem: soils, hydrology, disease, etc. Remedy the problem and replace plants. Provide a one-time fertilizer application to establish the ground cover if a soil test indicates it is necessary.
	Weeds and noxious plants are growing in the main treatment area.	Remove the plants by hand or by wiping them with pesticide (do not spray).
Embankment	Shrubs or trees have started to grow on the embankment.	Remove shrubs or trees immediately.
	Grass cover is unhealthy or eroding.	Restore the health of the grass cover – consult a professional if necessary.
	Signs of seepage on the downstream face.	Consult a professional.
	Evidence of muskrat or beaver activity is present.	Use traps to remove muskrats and consult a professional to remove beavers.
	An annual inspection shows that the embankment needs repair.	Make all needed repairs.
Outlet structure	Clogging has occurred.	Clean out the outlet device. Dispose of the sediment off-site.
	The outlet device is damaged	Repair or replace the outlet device.

