

# EXAMPLE ONLY

## DRY 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 Dry Detention Basins. Document Dry 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 Dry Detention Basin.

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

Important maintenance procedures:

- Manage the contributing drainage area to reduce the sediment load.
- Immediately after installing the dry detention basin, water the vegetation twice weekly as needed until the plants become established (typically six weeks).
- Only fertilize the dry detention basin according the results of a soil analysis after the initial fertilization required to establish vegetation.

After the dry 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
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 element:	Potential problem:	How to remediate the problem:
Entire dry detention basin	Trash/debris is present.	Remove the trash/debris.
Perimeter of dry detention basin	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 off-site.
	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 location where it will not cause impacts to streams or the BMP.
	Erosion has occurred or riprap is displaced.	Provide additional erosion protection such as reinforced turf 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.
	Water is standing more than 5 days after a storm event.	Check outlet structure for clogging. If it is a design issue, consult an appropriate professional.
	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.

