Dry Extended Detention Basins

A dry extended detention basin provides temporary storage of stormwater runoff to control the peak rate of runoff by allowing the stored water to release slowly over a period of time. This practice is mostly used to control water quantity, although some water quality benefits can be obtained by the settling of floatables and sediment. This extended version of a dry detention basin is designed to maximize water quality benefits.

There are some common problems to be aware of when maintaining a dry extended detention basin. They include, but are not limited to, the following:

- Sediment build-up
- Trash, litter, and debris accumulation
- Clogging in the inlet and outlet structures
- Erosion
- Structural repairs to inlets and outlets
- Mowers compacting and rutting the basin bottom
- Clogging in the emergency spillway
- Mosquitoes breeding in the practice

Routine maintenance should be performed on dry extended detention basins to ensure that the structure is properly functioning. Note that during the first year the dry extended detention basin is built, maintenance may be required at a higher frequency to ensure the proper establishment of vegetation in the practice. In the event of snow, check to make sure that the materials used to de-ice the surrounding areas stay out of the practice to avoid clogging and further pollution.

Inspect the dry extended detention basin after a large rainstorm. Keep drainage paths (both to and from the BMP) clean so that the water can properly flow into the basin. If the dry extended detention basin is not draining properly, check for clogging of the inflow and outflow structures.

If the forebay or dry detention basin has received a significant amount of sediment over a period of time, then the sediment at the bottom of the forebay or dry detention basin may need to be removed. Accumulated sediment in the practice decreases the available storage volume and affects the basin's ability to function as it was designed.

The table on the next page shows a schedule for when different maintenance activities should be performed on the dry extended detention basin.

Dry Extended Detention Basin Typical Routine Maintenance Activities and Schedule

Activity	Schedule
• Remove trash, sediment, and debris from forebay and inlet and outlet structures. • Mow the embankment and maintenance access. Periodically mow along maintenance rights-of-ways and the embankment. Remove grass clippings.	Monthly or as needed
• Repair and re-vegetate eroded areas. • Remove and dispose of vegetation that may hinder the operation of the pond. • Perform structural repairs to pond, outlet structures, embankments, control gates, valves, or other mechanical devices.	As needed
• Remove sediment when volume of pond is significantly reduced.	As needed (roughly every 20-50 years, but will vary based on the characteristics of the drainage area and amount of sediment entering the practice)