

Homeowners Associations and Stormwater Infrastructure

One of the responsibilities of a homeowner's association (HOA) is to maintain the common areas and green space within their neighborhood. These areas may include stormwater retention ponds, rain gardens, bioswales and/or other features often referred to as best management practices (BMPs). These features serve a critical function for the proper management of stormwater, including both quantity and quality aspects of stormwater management.

Sometimes the HOA owns and/or is also responsible for the maintenance for the stormwater inlets, pipes, drains and other parts of the storm drainage system within the neighborhood boundaries. These systems are often referred to as gray infrastructure. Maintenance responsibilities for these systems vary depending on the ordinance and/or policy of the county, city or town with jurisdiction.

In most communities the storm sewers, including pipes and structures, that are installed in new residential subdivisions and in the public right-of-way are owned and maintained by the local government entity. The water quality BMPs, including both detention ponds and mechanical water quality units, are typically privately owned and, therefore, the responsibility of the HOA or owner of the property on which the practice is located although this can vary. In commercial developments, typically all storm sewer infrastructure and BMPs are privately owned and maintained, though this too may vary by jurisdiction. For newer developments, there is often a BMP Operation and Maintenance (O&M) Manual that is developed during the project approval that stipulates how and when practices are to be maintained.

Why You Should Care

Stormwater runoff has a negative impact on water quality and quantity. You pay for those impacts, as do your neighbors, downstream communities, wildlife, and others. Impacts to water quality affect the cost to clean the water we use in our homes, the safety of water recreation, and the overall health of the ecosystem. Stormwater features also protect against flooding by impounding water and releasing it slowly into waterways. If these features do not function properly, communities are at risk.

To learn more: https://thewhiteriveralliance.org/programs/stormwater-landscape-maintenance-training/

WET PONDS

What They Are

Wet ponds are depressions in the ground designed to store water to prevent neighborhood flooding and also to filter water before it is released to a major waterway such as a river, lake, legal wetland, or reservoir. Local governments require that rain water be stored and treated by ponds or other practices to meet Federal and State laws. These ponds (and forebays, if present) need to be maintained in good working order to stay in compliance with these laws.

Your Responsibilities

- 1. Stabilization/Erosion Correction (bare spots)
 - Shoreline and Bank Erosion Stabilization
 - Animal Burrow Filling and Animal Trapping/Relocation
- 2. Vegetation Control
 - Invasive Aquatic Plant Removal
 - Bank Vegetation Removal
 - Native Plant Zone Trimming and Maintenance
- 3. Nuisance Algae Management and Control
- 4. Tree/Woody Vegetation Removal
 - Trees
 - Brush
- 5. Trash Collection/Removal
- 6. Dredging and Sediment or Muck Removal
 - Sediment
 - Muck/Biomass

Key Considerations

- In general, keep a big picture perspective, but don't let minor issues get out of control (i.e. inspect your ponds yearly).
- Many issues with bare spots (erosion) can be corrected by hand/shovel application methods with spreading of topsoil, seed, and straw or erosion control blanket.
- Consider installing native aquatic plants on the entire safety shelf of the pond to decrease shoreline erosion and decrease algae production. These plants will consume phosphorous and nitrogen which are contributors to algae production.
- Install an aeration device in the pond to help with oxygenation which can contribute to good water quality.
- Vegetation maintenance of invasive species should include complete removal. Chemical treatment options should be followed by dead plant removal.
- Consider using beneficial bacteria to reduce organic sludge (muck) from the pond. This may decrease the overall amount of dredging required.
- Be aware that there are several types of dredging options including traditional excavation, hydraulic dredging, and VAC truck pumping systems. Obtain several quotes and select the price/option that best fits your needs.
- If you have an intentional, planned native plant zone in or around your pond, hire an experienced professional to manage/maintain this area.

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DRY PONDS

What They Are

Dry Ponds are temporary storage areas for stormwater. Depending on design purpose, they should hold little to no water during dry periods but should be expected to hold water for a day or two after the last rain.

Vegetation in dry ponds can consist of managed turf grass. Preferably, they will be naturalized with native plants/grasses and protected from mowing and chemical spray. In some communities, naturalization may be required. Native vegetation areas should have signage placed around them for identification and protection. Dry detention areas can have small channels for conveying low flows that can be lined with concrete, turf, or planted with native vegetation. Some low flow channels in dry detention basins may double as infiltration areas where rain can soak into the ground.

Responsibilities

- 1. The outlet structure or pipe, where the water drains out of the pond, should be inspected and cleared of any blockages.
- 2. If vegetation is creating a blockage, then it should be cleared as well.
- 3. Undesired vegetation not specifically approved by the construction plan should be physically removed on a monthly basis or spot treated with an approved herbicide by a qualified individual.
- 4. Native planting areas should be mowed or cut once per year in the early spring or late fall. Cutting in late fall will promote more flowering plants. All cuttings should be removed from the pond area and properly disposed. Lawn clippings and leaves should not be placed in the basins.
- 5. Any bare spots should be repaired and re-vegetated with topsoil, proper seed, and erosion control blanket at a minimum.
- 6. Excess soil mounding, standing water, undesired vegetation or other obstructions, and/or low spots should be corrected by restoring the original shape and depth of the basin.
- 7. Trash collection/removal

Key Considerations

- 1. Improvements such as swing sets, trails, paths, athletic fields, etc. should not be placed within these ponds without proper government approvals. If improvements are allowed, they should not impede the free flow of water.
- 2. Fertilizers and pesticides should not be used within the basin unless absolutely necessary and only by a licensed professional that has been made aware that this is a stormwater structure.

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